REPORT RESUMES

ED 002 820 24

THE IDENTIFICATION AND MEASUREMENT OF SECONDARY SCHOOL HOMEMAKING TEACHERS' ATTITUDES AND OTHER CHARACTERISTICS ASSOCIATED WITH THEIR ABILITY TO MAINTAIN DESIRABLE LEARNING SITUATIONS.

BY- FORD, ROXANA R. HOYT, CYRIL J.
MINNESOTA UNIV., MINNEAPOLIS, SCH. OF HOME ECON.
REPORT NUMBER CRP-244 PUB DATE 60
MINNESOTA UNIV., MINNEAPOLIS, COLL. OF EDUCATION
EDRS PRICE MF-$0.27 HC-$7.84 196P.

DESCRIPTORS- *HOME ECONOMICS EDUCATION, HOMEMAKING SKILLS, SECONDARY SCHOOLS, *TEACHER ATTITUDES, TEACHER QUALIFICATIONS, ABILITY IDENTIFICATION, *COGNITIVE MEASUREMENT, LEARNING, *TEACHER CHARACTERISTICS, *MEASUREMENT TECHNIQUES, CLASSROOM ENVIRONMENT, *PSYCHOLOGICAL PATTERNS, EVALUATION TECHNIQUES, INTEREST TESTS, SELF EVALUATION, OPINIONS, *EFFECTIVE TEACHING, MINNEAPOLIS, MINNESOTA

TECHNIQUES FOR BUILDING AN ADEQUATE PROFILE TO DESCRIBE TEACHER REQUIREMENTS AND PSYCHOLOGICAL CHARACTERISTICS NEEDED FOR SATISFACTORY HOMEMAKING INSTRUCTION WERE STUDIED. WHEN THE PARTICULAR REQUIREMENTS OF A TEACHING POSITION WERE CONSIDERED IN CONJUNCTION WITH SUFFICIENT KNOWLEDGE OF THE CHARACTERISTICS OF A TEACHER CANDIDATE, EXPECTATIONS WERE THAT THE QUALITY OF HOME ECONOMICS INSTRUCTION WOULD IMPROVE AND THAT LOSSES TO THE PROFESSION COULD BE DECREASED. THE ATTAINED LEVEL, THE VARIABILITY, AND THE INTERRELATIONS AMONG SEVEN ATTITUDINAL MEASURES OF SAMPLE OF HOMEMAKING TEACHERS IN A 26-STATE AREA WERE INVESTIGATED. ATTITUDES SELECTED FOR STUDY WERE TOWARD THE PROFESSION, THE COMMUNITY, COWORKERS AND THE SCHOOL COMMUNITY, SUBJECT MATTER, FAMILIAR INTERPERSONAL RELATIONS, AND TWO MEASURES TOWARD PUPILS. "CRITERIA FOR CLASSROOM EFFECTIVENESS" IN HOME ECONOMICS EDUCATION WERE DEVELOPED, AND CRITERION SUBJECT GROUPS WERE SELECTED TO RESPOND TO STUDY INVENTORIES. A CLASSROOM-TEACHER OBSERVATION PHASE WAS ALSO CONDUCTED. NORMS FOR THE TEACHER ATTITUDE SCORES WERE DEVELOPED AND DIFFERENCES NOTED FOR EACH OF FIVE SCHOOL-SIZE STRATA CONSIDERED AND FOR THE COMBINED GROUP. MORE WIDESPREAD RESEARCH WAS RECOMMENDED IN THE PROJECT CONCLUSIONS IN TERMS OF OBSERVATIONS, ATTITUDE INVENTORIES, AND SIZE SAMPLE. OBSERVATIONS BY NONHOME ECONOMICS PERSONNEL WILL ALSO BE USEFUL IN FUTURE STUDIES. (JH)

ED002821

28

THE IDENTIFICATION AND MEASUREMENT OF SECONDARY SCHOOL HOMEMAKING TEACHERS' ATTITUDES AND OTHER CHARACTERISTICS ASSOCIATED WITH THEIR ABILITY TO MAINTAIN DESIRABLE LEARNING SITUATIONS

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Office of Education
This document has been reproduced exactly as received from the person or organization originating it. Points of view or opinions stated do not necessarily represent official Office of Education position or policy.

Roxana R. Ford and Cyril J. Hoyt

Project Number 244(7139)

July 1, 1957 to June 30, 1960

School of Home Economics   College of Education
University of Minnesota
St. Paul   Minneapolis

The research reported herein was performed pursuant to a contract with the United States Office of Education, Department of Health, Education, and Welfare.

ACKNOWLEDGEMENTS

3V1VA
82

The investigators acknowledge the cooperation of several University departments chiefly the School of Home Economics, the College of Education, the Bureau of Educational Research, the Scientific Computing Center and the Station Statistician's Office of the Experiment Station.

Also the investigators are deeply grateful to all those individuals who contributed so generously of their time and thought at various stages of the study. Indeed, without such help, the work could not have been done.

Among those who have contributed materially to the research are:

the teachers who participated in the study and their pupils;

the members of the Home Economics Service of the U.S. Office of Education;

the Supervisors of Home Economics Education of 32 states and their able assistants;

the eleven Home Economics Educators who served as members of the panel for the development of the criteria;

the Teacher-Educators from Minnesota and South Dakota colleges who served as 'brainstormers';

our colleagues who gave helpful advice: Dr. Amy Jean Holmblade, Dr. Gladys Bellinger, Dr. Helmi Koivisto, Dr. Marjorie Thurston;

the research assistants: Jean Fackler Pinkerton, Cecile Cole Olson, David Giese, Ram Gupta; and

the secretaries who smoothed the way throughout: Florence Stephens, Dorolese Wardwell, and Margaret Van Zanden.

Roxana R. Ford

Cyril J. Hoyt

States Participating in Phase I

Kentucky
Michigan
Minnesota
Nebraska
North Dakota
South Dakota
Wisconsin

States Participating in Phase II

Arizona
Arkansas
Colorado
Florida
Idaho
Indiana
Iowa
Kansas
Louisiana
Maine
Minnesota
Missouri
Montana
Nevada
New Hampshire
New Mexico
North Carolina
Oklahoma
Oregon
Pennsylvania
South Carolina
Tennessee
Utah
Vermont
Virginia
Wyoming

TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS iii

STATES PARTICIPATING IN THE STUDY iv

LIST OF TABLES vi

LIST OF FIGURES xiii

ABSTRACT OF THE STUDY 1

Chapter

I. INTRODUCTION 11

II. DEVELOPMENT OF THE INSTRUMENTS 15

III. NORMATIVE PHASE 27

IV. CLASSROOM OBSERVATION PHASE 72

V. SUMMARY OF RESULTS AND IMPLICATIONS 80

APPENDIXES .... 87 - 179

A. Forms used in the study

B. Selected items with frequencies classified by school-size strata and response status

C. Two way analysis of variance tables for computing internal consistency reliability of attitude inventory scores

D. Computation tables: attitude inventory scores

E. Mean attitude inventory scores for norm samples

BIBLIOGRAPHY .... 180 - 181

LIST OF TABLES

Table Page

1. What Would You Do -- class means for pupils of teachers in two criterion groups selected from the central region 25

2. Number of respondents in homemaking teacher samples from a 26-state area classified by size of secondary school faculty 29

3. Number of homemaking teachers in selected samples from 26 states classified by tentative school-size strata and amount of data available 30

4. Number of homemaking teachers in selected samples from 26 states providing information on school-size classified by school size strata and amount of data provided 30

5. Total of five school-size samples of homemaking teachers classified by status of responses and service as supervisors of student teachers 31

6. Total of five school-size samples of homemaking teachers classified by status of responses and participation in regional or state conferences for homemaking teachers 31

7. Total of five school-size samples of homemaking teachers classified by status of responses and degrees earned 32

8. Total of five school-size samples of homemaking teachers classified by status of responses and length of teaching experience.................... 32

9. Coefficients of reliability for teacher attitude inventory scores based on a sample of respondents from schools in twenty-six states with less than sixteen secondary school teachers 37

10. Intercorrelations among seven teacher attitude scores based on sum of five within school-size strata co-variances and variances of samples composed of 712 cases from school in twenty-six states 38

Table Page

11. Means, medians, and standard deviations on three teacher attitude scores for samples of five school-size strata of the 1958-59 population of ninth grade homemaking teachers in the vocationally approved departments in twenty-six states....................................39

12. Means, medians, and standard deviations on four teacher attitude scores for samples of five school-size strata of the 1958-59 population of ninth grade homemaking teachers in the vocationally approved departments in twenty-six states....................................40

13. Analysis of variance among school-size strata means on attitudes toward school community...... 41

14. Analysis of variance among school-size strata means on attitude toward the profession of teaching.. 41

15. Analysis of variance among school-size strata means on attitude toward the local community..... 41

16. Analysis of variance among school-size strata means on preferential attitude toward subject matter.. 41

17. Analysis of variance among school-size strata means on homemaking teachers attitude inventory score................................ 41

18. Analysis of variance among school-size strata means on Minnesota teacher attitude inventory score.. 42

19. Analysis of variance among school-size strata means on attitudes toward familiar interpersonal relations....................................... 42

20. Deciles and means of school-size strata on attitude toward school community................ 42

21. Deciles and means of school-size strata on attitude toward profession........................ 43

22. Deciles and means of school-size strata on attitude toward community........................43

23. Deciles and means of school-size strata on attitude toward subject matter................... 44

Table Page

24. Deciles and means of school-size strata on HTAI..44

25. Deciles and means of school-size strata on MTAI..44

26. Deciles and means of school-size strata on attitude toward familiar interpersonal relations....45

27. Deciles and means on attitudes toward school community, profession and community for homemaking teachers classified by grade level of pupils..45

28. Deciles and means on attitude toward subject matter, children, and familiar interpersonal relations of homemaking teachers classified by grade level of pupils..........................46

29. Deciles and means on attitudes toward school community, profession, and community for homemaking teachers classified by length of teaching experience............................46

30. Deciles and means on attitudes toward subject matter, HTAI, MTAI, and familiar interpersonal relations for homemaking teachers classified by length of teaching experience..................47

31. Deciles and means on seven attitude scores for homemaking teachers who shared on program of conferences, institutes, and/or workshops in 1958-59.. 48

32. Number and percentage of teachers in each stratum reporting various hours per month spent on non-class responsibilities of an educational nature............................. 49

33. Number and percentage of teachers in each stratum reporting various hours per month spent on non-class responsibilities primarily non-educational................................ 51

34. Mean attitude scores of homemaking teachers classified according to time spent on non-class activities of primarily educational nature..........51

Table Page

35. Mean attitude scores of homemaking teachers classified according to time spent per month on non-class activities having limited educational value. 52

36. Mean attitude scores classified by service as supervisor of student teachers. 52

37. Mean attitude scores classified according to composition of classes and subject taught. 53

38. Mean attitude scores classified by adult education responsibilities. 53

39. Mean attitude scores of homemaking teachers classified by population of their school district. 54

40. Mean attitude scores of homemaking teachers classified according to enrollment in day-school classes. 55

41. Mean attitude scores of homemaking teachers classified according to the grade level of their classes. 55

42. Mean attitude scores of homemaking teachers classified according to teaching level preferred. . . . 56

43. Frequency distribution of 712 homemaking teachers classified by teaching level and preference of teaching level. 56

44. Mean attitude scores of homemaking teachers classified according to adequacy of departmental space and facilities. 57

45. Mean attitude scores of homemaking teachers classified according to the teachers' perception of pupil relationships. 57

46. Mean attitude scores of homemaking teachers classified according to teachers' perception of school policy regarding teachers' private life. 58

47. Mean attitude scores of homemaking teachers classified according to length of teaching experience. 60

48. Mean attitude scores of homemaking teachers classified by marital status. 60

Table Page

49. Percentage and frequency distribution of marital status of five homemaking teacher samples of population strata based on number of secondary teachers in school system........... 62

50. Mean attitude scores of homemaking teachers classified by pre-dominant reason for entering the profession................................. 63

51. Mean attitude scores of homemaking teachers classified by time of decision to enter the teaching profession............................. 63

52. Mean attitude scores of homemaking teachers classified by graduation honors earned............ 64

53. Mean attitude scores of homemaking teachers classified according to the amount of graduate work.. 64

54. Mean attitude scores of homemaking teachers classified according to time since last academic credit was earned............................. 65

55. Mean attitude scores of homemaking teachers classified according to attendance at conference of one or more days............................ 67

56. Mean attitude scores of homemaking teachers classified according to attendance at a workshop of a week or more............................ 67

57. Mean attitude scores of homemaking teachers classified according to their feeling about the profession.................................. 68

58. Mean attitude scores of homemaking teachers classified according to attitude about present position...................................... 68

59. Mean attitude scores of homemaking teachers classified by employment plans for next year...... 69

60. Mean attitude scores of homemaking teachers classified according to their relations with their principal................................ 70

61. Mean attitude scores of homemaking teachers classified according to their relations with the state supervisor............................... 70

Table Page

62. Mean attitude scores of homemaking teachers classified according to their relations with the local supervisor....71

63. Number of teachers responding in classroom observation sample classified by school-size, rater, and time of rating.... 73

64. Analysis of variance of classroom observation sample teacher ratings classified by time of rating and rater.... 74

65. Mean criteria rating for teachers in observation sample classified by school-size, time of rating, and rater.... 74

66. Intercorrelations among seven teacher attitude scores and three classroom criteria based on equal samples from five school-size strata of Minnesota vocationally approved homemaking departments in 1958-59....75

67. Analysis of variance among mean ratings of teachers in the classroom observation sample and the items of criteria of classroom effectiveness.... 77

68. Analysis of variance among mean ratings of teachers in classroom observation samples on eighteen items of the criteria dealing with pupil behavior and qualities of the learning experience...77

69. WWYD means of classes in classroom observation samples from five school-system-size strata.... 78

70. Analysis of variance among class means on WWYD for classroom observation samples from five system-size strata....78

71. Analysis of variance among item means and teacher class means on WWYD based on sample of nineteen teachers in stratum I.... 79

LIST OF FIGURES

Figure Page

1. Percentage of teachers in each stratum reporting various average numbers of hours per month spent on non-class responsibilities........50
2. Percentage distribution of marital status of homemaking teachers for five population strata based on size of school system........61
3. Graduate work of homemaking teachers in five school-size strata shown in cumulative percentages........66

ABSTRACT OF THE STUDY

Background

Administrators have been faced for years with the problem of obtaining a sufficient number of homemaking teachers to fill positions in secondary schools. Teacher-educators report that many of those who prepare for teaching positions do not enter the profession. Further, not all of those who are competent in the subject matter of home economics and not all of those who are qualified for certification will be equally effective teachers. Additional means for identifying people whose potentialities seemingly are those required by certain positions would be of value.

It might be surmised that attitudes of a teacher are related not only to her effectiveness but also to her satisfaction with her work. If this is true, inventories for the measurement of attitudes toward many facets of the job should be of value both to administrators and teacher-educators.

Purposes and Significance of the Study

The goal of this study was to contribute to an adequate description of the relatively stable psychological characteristics of homemaking teachers. Such information is assumed to be important for selecting students,- for indicating aims of professional preparation, and for placing teachers selectively by matching their special abilities and interests with position requirements.

Furthermore, when the particular requirements of each teaching position are considered in conjunction with an adequate knowledge of candidates' characteristics, it is expected that losses to the profession can be decreased. Such means for increasing the supply of available teachers is a direct attack upon alleviating the losses of personnel during the early years of professional life. When a teacher leaves the profession because of dissatisfaction she very frequently makes her decision on the basis of the demands of one particular position. Such losses of personnel from the profession can be lessened when adequate knowledge of critical psychological characteristics of teachers becomes available. This project contributed to such a body of knowledge by studying certain attitudinal characteristics of homemaking teachers and the relations of these to observable criteria of classroom effectiveness and to one aspect of pupil achievement.

Some things are known about critical skills, understandings, and information which characterize homemaking teachers. Indeed much of the content of current college programs of preparation has been, is, and should be concerned with the development of these charactertistics in prospective teachers. The emphasis of the current study on only certain attitudinal characteristics of teachers in no way implies that the investigators minimize the importance of knowledges, skills or other attitudes. Furthermore, it is recognized that attitudes may be changed by information and understandings learned as well as by the emotional reactions to experiences undergone in the process of developing cognitive behaviors.

Objectives

The four objectives specified in the project application were:

1. To determine the relation of homemaking teachers' competencies to their attitudes toward pupils, the community, co-workers, family relationships, the profession, and subject matter
2. To supplement currently available instruments for measuring the ability of homemaking teachers to create a classroom situation conducive to learning
3. To establish homemaking teacher norms on selected variables identified as related to teaching competence in the classroom situation
4. To develop a profile identifying patterns of teachers' attitudes which were found to be related to their ability to maintain a desirable learning situation

Although each of the objectives was achieved to some extent, the specificity implied in the fourth objective was not fully consummated. The degree to which the objectives were achieved was limited by imperfections in obtaining a comprehensive assessment of teachers' classroom competences.

Procedure

Delimitation

This research investigated the attained level, the variability, and the interrelations among seven attitudinal measures of a random sample of homemaking teachers in each of five school-size strata of the 1958-59 population of ninth-grade teachers in the vocationally approved departments of the white public schools in a 26-state area. In one state, Minnesota, further study was made of the relations of these attitudes to a composite of observers' ratings on 32 Criteria of Classroom Effectiveness. In addition, a mean pupil achievement score, on one specified instructional objective for a randomly selected class of each teacher in this Minnesota sample was obtained. The relations of this mean achievement to the seven teacher attitude scores was determined.

The seven teacher attitudes selected for study were: attitude toward the profession, the community, co-workers and the school-community, subject matter, familiar interpersonal relations, and two measures of attitude toward pupils. Pupil achievement was assessed relative to mature interpersonal relations with peers and adults. Scores were obtained for each teacher on each attitude by the summation of item-response weights of +1, -1 or zero for the subjects' self-reports regarding their level of agreement or disagreement with a lengthy series of rather brief and direct attitudinal statements. The item-reponse weights were empirically determined from item-analysis data on a larger pool of items administered to two additional criterion groups of 139 each.

Conduct of the Study

The first year (1957-58) of the study was devoted to the development of the Criteria of Classroom Effectiveness and preliminary forms of a biographical data sheet, five teacher attitude inventories, and a pupil relationships self-report schedule. In addition, during 1957-58, data were collected and item-analyses completed for the teacher attitude inventories and the pupil problem form. A jury of eleven leaders in homemaking education rated the level of importance of each suggested criterion on a list presented to them by mail. The investigators summarized these ratings and other suggestions and compiled a list of 32 Criteria which were used in the item-analysis phase of the study and the classroom observation phase.

During the second year (1958-59) data were collected for both the normative and classroom observation phases. The latter used a stratified random sample of 85 Minnesota high school homemaking teachers and one ninth (or tenth) grade class taught by each. The stratification was based upon the size of the secondary school faculty in the school system. The lower boundaries of the five strata were 0, 15, 30, 60, and 300 secondary school teachers. These strata contained 76, 87, 41, 23, and 22 vocationally approved departments from which samples of 19, 17, 18, 16, and 15 teachers provided complete data.

The teachers in the sample responded to a biographical data form; the revised attitude inventories, CP and SS; and to the Minnesota Teacher Attitude Inventory.[1] The form CP consisted of 285 items selected from the preliminary forms on attitudes toward the profession, the community, the school community and familiar interpersonal relations. The form SS contained items on preferences related to subject matter commonly dealt with in homemaking classes.

---

[1] Walter W. Cook et al., Minnesota Teacher Attitude Inventory (New York: Psychological Corporation), Form A, 1951.

In addition, each of the 85 Minnesota teachers was visited for a half-day or more by a staff member of the research team for the purposes of assessing the degree to which the Criteria of Classroom Effectiveness were met. These observations admittedly omitted all "out-of-classroom" aspects of the teachers' activities and in that sense were not intended as a comprehensive evaluation of the teachers' effectiveness. Also, one class of each teacher responded to a pupil problem inventory dealing with personal, social, and family relations. The mean pupil score for the class was used as another measure of classroom effectiveness.

Data for the normative phase of the study were also collected during 1958-59. The population of teachers in a 26-state area excluding all of the Central Region except Minnesota was stratified on the same basis as used for the classroom observation phase. Complete data were obtained from 712 teachers classified in the five strata as follows: 119, 190, 157, 115, and 131. Partial data about nonrespondents were obtained for studying the extent of bias in the data reported.

The teachers in the normative phase responded to the teacher attitude inventories and the biographical data form. These responses were scored on the basis of six keys on mutually exclusive groups of items selected on the basis of the item-analysis data. A seventh score for each teacher was obtained on the Minnesota Teacher Attitude Inventory.

Summary of Procedure

1. Eleven recognized leaders in home economics education assisted in the development of Criteria for Classroom Effectiveness. Each person made judgments concerning the relative importance of various conditions and/or procedures in the maintenance of a desirable classroom learning situation.

2. A biographical data sheet was devised to describe the individual, her professional preparation, and her teaching situation and attitudes toward it.

3. Five inventories were constructed which dealt with attitudes toward the community, school-community, profession, subject matter, and familiar inter-personal relations. These were designated by letter: C, SC, P, Sm, and F.

4. Criterion groups in the Central Region were obtained through the use by supervisors of the Criteria of Classroom Effectiveness. Teachers in these groups filled out the data sheet, and responded to the five inventories as well as to the MTAI. Item analysis resulted in the revision of the inventories into the new form, CP, including 285 items from the original five forms.

5. Eighty-five Minnesota teachers were used for the classroom observation phase. These represented a stratified random sample of the vocationally approved departments. Stratification was based on the size of the secondary school faculty. These teachers provided biographical information and responded to the inventories (CP, SS, and MTAI).

6. Two procedures were used to provide some measure of teaching effectiveness. Each teacher was visited for at least one-half day and rated on the basis of the Criteria for Classroom Effectiveness. In addition, pupils in a selected ninth grade class (or tenth grade if no ninth grade class was available) responded to the pupil relationships inventory.

7. Relationships between the rating, mean scores of pupils, and attitude scores were studied.

8. Teachers in five school-size strata in a 26-state area, excluding the states in the Central Region, responded to the revised inventories, the biographical data sheet, and the MTAI. Responses were scored on the MTAI and six keys based on mutually exclusive groups of items selected on the basis of item analysis data. Interrelationships among scores were developed for each stratum. Biographical data were reported.

Results

Findings and Interpretation

Decile norms for these seven teacher attitude scores were developed for each stratum and for the combined group. The differences among the five strata means and variances on each of the seven scores were studied and correlations among the scores were reported. In addition, selected biographical items were used as bases for classifying the respondents, and attitudes scores for the subgroups thus obtained were reported.

Bias of Non-Response

The investigation of characteristics of non-respondents in the norm samples and in the classroom observation samples gave favorable results. That is, there was little or no evidence of serious bias in the sample group for which complete data were available. State supervisors and others provided selected biographical data on nearly all non-respondents. The data did indicate, however, that the non-respondent group contained a higher percentage of teachers with over 20 years experience than did the responding group. Since the length of experience at this level was not related to the attitudes studied, this difference of the respondent group was interpreted as unimportant.

Intercorrelations and Reliability of Teacher Attitude Scores

The seven teacher attitude scores formed two negatively correlated clusters, one emphasizing interpersonal relations and the other oriented toward things, groups or abstract concepts. The preference for subject matter (Sm) was not correlated with either.

1. A subgroup of 75 MTAI items was selected for study since some questions had been raised concerning the appropriatness for homemaking teachers of some items of the standardized form. The correlation of this subscore with the total MTAI score was found to be so high that further consideration of the subgroup was dropped. The correlation was .90 in one sample and .80 in the other, the former approaching the maximum possible in view of the reliability of the measurements. The other inventory score composing the first cluster dealt with intrafamily and other interpersonal relations attitudes, called F, in this study. This score (having a reliability coefficient of .84) was based on 41 two-choice items.

The second cluster of attitudes was composed of those toward the profession, the community, and the school community. These were assessed with only low reliabilities (.62, .83 and .51 respectively) but showed intercorrelations approximately .40 in both samples. Attitudes toward community and profession showed the highest correlations, .67 in the Minnesota sample and .52 in the large norm sample.

2. Although the assessment of observed classroom activities showed high internal consistency, it was not found linearly correlated with the teachers' attitudes in any area except that toward pupils as measured by the MTAI. This relation was negative, -.24, a value in the doubtful region of significance, between the one per cent and five per cent level. This finding was interpreted as indicating that the Criteria of Classroom Effectiveness emphasized aspects of the classroom situation other than the pupil-teacher rapport.

It is recognized that the use of total ratings on Criteria of Classroom Effectiveness as a measure of homemaking teachers' competence is far from comprehensive since much of her professional practice deals with other types of pupil contacts, adult contacts, and department organizational and managerial activities. Certain of the attitudes studied in this project such as those relative to the community, the school community, and the profession are likely to be more highly related to other aspects of professional practice than to the classroom procedures. Hence, further study of the critical importance of such attitudes should consider their relation to the criteria of effectiveness for these other professional activities.

3. The teachers' class means on the pupil relationship inventory, What Would You Do, had such a low correlation with each of the teacher attitude scores that none was significant. The mean scores on WWYD for the teachers in the five strata, however, were found to be significantly different. The means in the two smallest school-sizes were higher than those for the larger schools. This indicated that the girls taking homemaking in the smaller communities achieve a higher status in this objective than those in the larger communities. This discrepancy in means may reflect a difference in community mores which makes this objective more difficult to achieve in larger communities and/or a different selection of girls who "elect" homemaking in larger communities.

Strata Means on Teacher Attitudes

Differences in means of attitude scores among teachers in the five school-size strata indicate considerable uniformity of means and variances. The means on MTAI were higher for the teachers in the two larger strata. The differences among means was significant at the two per cent level. The difference among strata means on C and on Sm were of doubtful significance. In the latter the means for the two larger school-size strata were higher while in the former, C, the two smaller school-size strata had the higher means.

Relation of Teacher Attitudes to Biographical Data

When the mean attitude scores were studied for the subjects classified on the basis of biographical items, only a small number of items provided evidence of relationship to any of the teachers' attitudes. These items concerned the supervision of student teachers, the subject matter and sex of pupils taught, population of school district, perception of pupil morale, predominant motivation for entering the profession, earning baccalaureate honors, number of graduate credits earned, recency of graduate work, attendance at homemaking teachers' conferences, satisfaction with the profession and with the current position.

Summary of Results

The attitude inventory scores fell into two clusters. Those dealing with community, school community, and profession were positively correlated. Those centered more directly on people (MTAI, HTAI, F) were also positively correlated. However, these two clusters were negatively related.

Ratings based on the Criteria of Classroom Effectiveness showed a low negative relationship with scores on the 'people-centered' inventories which suggests that the criteria reflect aspects of the classroom situation other than teacher-pupil rapport.

Scores on the MTAI and HTAI had a very high positive correlation since the latter was a subscore based on 75 of the original MTAI items. Decile scores on the seven attitude inventories reflected no pronounced differences among strata.

In total, teachers' class means on the pupil relationships inventory, WWYD, had virtually no correlation with any of the teacher attitude scores; however, differences among strata were evident. Means from the classes of the teachers in the two smallest school-size strata were higher than those in the larger schools.

Strata means were not significantly different on SC, P, F, and HTAI. Teachers in strata IV and V had higher means on Sm and MTAI than did teachers in other strata. Those in stratum V earned the lowest mean on the C inventory.

More than two-thirds of the teachers, 74 per cent, were married or divorced. The largest part of the group was comprised of mothers. The married teachers earned slightly higher mean scores than single teachers on all inventories except attitude toward community.

The majority of teachers entered the profession because of liking for or interest in people although one in ten did so because of convenience. Those who entered because of idealism or liking for and interest in people scored significantly higher on attitudes on the 'people-centered' inventories (MTAI, HTAI). Those who entered for reasons of convenience earned significantly higher mean scores on attitude toward the school community and markedly higher scores on attitudes toward the community and the profession. The latter were in the range of doubtful significance.

Slightly less than one-fourth, 23 per cent, of the population graduated from college with honors. Teachers in this group earned higher mean scores than others on all inventories with the mean score on attitude toward subject matter being significantly higher.

The largest number of teachers had from ten to twenty years experience with the median 8.5. There was little relation between inventory scores and number of years of experience.

By far the majority of teachers, 86 per cent, perceived pupil relationships in their schools as good or excellent and these people earned significantly higher scores on measures of attitude toward pupils. Conversely, those who saw relationships as poor scored significantly higher on attitudes toward the community and profession.

Two-thirds of the respondents felt their profession to be 'the very best' or 'best' although one-third had reservations in this respect. Those who held the profession in high esteem had decidedly higher mean scores on attitudes toward pupils with that on MTAI being significantly higher. Those who rated the profession less highly earned significantly higher mean scores on attitude toward it as well as on attitudes toward the community.

Although six per cent of the respondents were unaware of the state supervisors, two-thirds of the teachers believed that the state supervisory staff gave constructive help. Those who saw supervision as helpful had higher mean scores on MTAI, HTAI, and F but lower SC, C, and P scores than others.

More than two-thirds, 72 per cent, of the population had taken courses beyond those required for a B.S. or a B.A. degree and about one-fourth, 22 per cent, had earned a Master's degree, its equivalent, or more. Significantly higher mean scores on attitudes toward familiar interpersonal relations were earned by those who had engaged in formal study most recently.

Although 17 per cent attended no conferences for homemaking teachers, 40 per cent actually participated in one of short duration. Participants earned higher MTAI, HTAI, and Sm mean scores but non-attendants scored significantly higher on attitudes toward profession and community. Teachers who took part in workshops or conferences of a week's duration earned higher, but not significantly so, scores on people centered-inventories. Those who attended or had no opportunity to attend were significantly higher in attitudes toward the community (C). Those who participated in the program of a workshop had a higher mean on subject matter preferences. These latter differences in means of subgroups were significant at a doubtful level.

The assignment of most teachers was that of teaching homemaking to girls only. Somewhat more than one-third of the total also made some contribution to the adult program. Those who taught homemaking to both boys and girls had significantly higher mean scores than others on attitudes toward pupils (MTAI, HTAI) and familiar interpersonal relations. They earned significantly lower scores on attitudes toward community.

Thirty-four per cent of the teachers were serving or had served as supervising teachers. Half of this number had no preparation for supervision. Supervising teachers scored significantly higher than others on attitudes toward pupils, familiar interpersonal relations, and subject matter. They scored lower on P. Those who had some preparation for supervision scored higher on the inventories named than did those without such preparation.

Teachers in the larger school districts earned significantly higher scores on the 'people-centered' inventories (MTAI, HTAI, F) than those in smaller-sized districts. Their scores are likewise higher, but at a doubtful level of significance, in attitudes toward subject matter. Teachers in the smaller-sized school districts earned higher mean scores in attitudes toward community although the differences in means were of doubtful significance.

Fifty-four per cent of the teachers were teaching at the exact level for which they stated a preference.

Conclusions

1. This study suggests that the complexity of classroom teaching effectiveness is such that it cannot be assessed satisfactorily by a rating given during a single lengthy observation period despite numerous safeguards in the application of criteria.
2. If the ratings obtained through the use of the criteria are valid, it is apparent that attitudes other than those reflecting rapport with pupils assume a degree of importance which calls for further study.
3. Since this investigation is a first step in obtaining interrelationships between classroom effectiveness and attitudes of homemaking teachers, it is suggested that further study might well be made with the
    observations increased in number
    observations made by non-home economics personnel
    attitude inventories increased in length, and
    sample size increased.
4. The WWYD inventory seems to be promising; however, further study of the groups with which it is to be used needs to be made; for example,
    composition of the home making classes: age, ability levels,
    socio-economic levels and
    composition of families

CHAPTER I

INTRODUCTION

This study deals with the attitudes of in-service homemaking teachers. The central purpose is to develop inventories whereby the teachers' scores characterize their attitudes toward certain selected aspects of their professional activities. In one phase of the study described in Chapter IV, classroom observations and mean pupil achievement were studied with reference to the attitude scores of a small sample of teachers.

Background of the Study

For several years, administrators have been faced with the problem of obtaining a sufficient number of homemaking teachers to fill the positions in the secondary schools. Schools of home economics have been concerned with recruiting and preparing young women for the available jobs. Although the teacher shortage has by no means been limited to homemaking, certain factors have been somewhat peculiar to this field.

Two points which bear upon the demand for homemaking teachers are the number of pupils of secondary school age and the nature of the homemaking program itself. The former needs no comment: the population explosion has been well publicized. It is less well known, however, that homemaking instruction is an integral part of the program for girls in many junior high schools, and for boys in some. The subject has an important contribution to make to senior high school pupils also. Since much of the work carried on in homemaking classes is of a laboratory nature and since the number who can be accommodated in a laboratory is relatively fixed, the pupil-teacher ratio is often less than in some other school subjects and thus creates a demand for still more teachers.

Further, teacher educators report that many of those who prepare for teaching positions in the secondary school do not enter the profession. The degree and certificate obtained serve as insurance against a possible future need for employment, whereas the education itself is valued by the young woman who is contemplating marriage and homemaking. Many of those who do teach do so for only a very short period of time - a situation which gives rise to the question of whether the employment of short-term teachers is conducive to an effective program.

Administrators and teacher educators recognize that not all those who are competent in the subject matter of home economics and not all who have qualified for certification will be equally effective as teachers. Additional means for identifying people whose potentialities seemingly are those required by certain positions would be of value. Also, what constitutes a challenging, interesting position for one person does not necessarily do so for another. A nationwide study of homaking teachers[1] suggests that job satisfaction is related to three major areas. First, school conditions including such factors as departmental adequacy, class size, and the teaching assignment were related to a so-called satisfaction score. Second, the community itself had some bearing on the feeling of the teacher. In addition to size, its provisions for social and cultural pursuits as well as favorable living conditions were of importance. Finally, a complex which may be referred to as opportunities for personal and professional development was related to satisfaction with the position.

The question may be raised as to whether a satisfied teacher is necessarily an effective teacher. It is reasonable to expect that a person who finds satisfaction in her work will remain in the profession longer than will one who is less satisfied or is dissatisfied. But the administrator and the community seek a person who is both satisfied with and effective in the position.

It might be surmised that attitudes of a teacher are related not only to her effectiveness but also to her satisfaction with her work. This would appear to be especially true in a subject area such as home economics which encompasses markedly diverse content. Further, in addition to intellectual competence, the teaching of homemaking demands artistic and creative abilities as well as managerial and manipulative skills.

The vocational homemaking program[2], although varying somewhat from state to state, likewise makes certain demands of the teacher and presupposes certain attitudes. Central is a belief that instruction should contribute to the improvement of personal and family life--improvement on a basis which recognizes the values held by individuals and families and their right to be different. Close cooperation with parents through periodic visits to the homes and through individual and group conferences is essential. To take learning beyond the classroom requires an imaginative approach to the use of school and community resources as well as those of the homes. Thus the vocational program and the subject matter itself make it imperative that the teacher be sensitive to family and community attitudes and be able to work harmoniously with others despite such differences as she may find between groups or between herself and some members of the community.

---

[1] Home Economics Research Committee. Factors Affecting The Satisfactions of Home Economics Teachers. American Vocational Association, 1948.

[2] Vocational homemaking program is used here to mean a secondary school program which meets the standards for reimbursement set up in the given state.

Beyond this, those in the vocational program are expected to engage in practices which, while often recommended, are not mandatory for teachers of other subjects or for non-vocational homemaking teachers. Foremost among these are reports of both teacher and pupil activity based on accurate records. It is assumed also that vocational teachers will participate in local, regional, or state conferences, and in institutes and workshops for professional development.

Importance of the Study

The homemaking teacher's attitudes toward these many facets of her job appear to be worthy of investigation. If attitudes are related to the quality of instruction, then inventories for their measurement should be of value both to administrators and teacher-educators.

In many colleges, a variety of means are used to identify those who should be encouraged to give some consideration to preparing for teaching as a profession. In addition to these means, attitude inventories might aid in ferreting out those who would be likely to maintain high quality learning situations in the classroom. The use of such inventories might take one of two directions. First, to inform the student of ways in which she differs markedly from the norm so that she might decide for herself whether or not she should continue in the homemaking education curriculum. Secondly, if used early enough in the college years, to assist a counselor in identifying young women who appear to possess attitudes which might make for effectiveness as a homemaking teacher.

The supervising teacher[3] is of inestimable importance in the professional preparation of prospective homemaking teachers. It is her influence which is felt most keenly, her example which is most often followed by the impressionable student teacher. The availability of inventories effective in picking out teachers having especially high attitude scores in those aspects related to the maintenance of desirable learning situations should indeed be a boon to teacher-educators.

Faculties of schools and departments of home economics in colleges might find the results accruing from the use of inventories helpful in curriculum studies. For example, consistent findings of undesirable rigidity or narrowness in attitudes would suggest that instructors provide more class time for consideration of certain problems, that courses provide for broader experiences, or that curricula be changed.

---

[3] Here used to designate the secondary school homemaking teacher to whom college students are sent for practical class and extra-class experience. Sometimes called cooperating teacher.

Supervisors or administrators might find additional uses for such inventories. Attitude scores may give some indication as to whether an individual will make a better contribution in a vocational or non-vocational department. As a result, placement within a local school system or in the state could well be improved. Inventory scores might also give clues for needed in-service education on a local, regional, or state basis.

Objectives of the Study

The initial statement specified the four following principal objectives:

1. Determining the relation of homemaking teachers' competencies to their attitudes toward pupils, the community, co-workers, family relationships, the profession, and the subject matter.

2. Supplementing the currently available instruments for measuring the ability of homemaking teachers to create a classroom situation conducive to learning.

3. Establishing homemaking teacher norms on selected variables identified as related to teaching competence in the classroom situation, and

4. Developing a profile identifying patterns of teachers' attitudes which were found to be related to their ability to maintain a desirable learning situation.

Although each of the objectives has been achieved to some degree, the fourth, especially, lacks the specificity implied by the above statement. Since the problems involved in obtaining assessments of teachers' classroom competencies were not solved adequately in this study, each of the objectives was achieved only to the degree that the obtained assessments of competency approached adequacy.

CHAPTER II

THE DEVELOPMENT OF INSTRUMENTS

Overview

This study of homemaking teachers' attitudes had three distinct phases. The first consisted of the development of several attitude inventories and a list of criteria of classroom effectiveness. In this phase items were written, item analyses were performed, and selected items were organized into inventories. The other two phases, though conducted simultaneously and somewhat supplementary in nature, each dealt with data on different samples of teachers. The normative phase of the study was concerned with surveying certain attitudes of randomly selected samples of homemaking teachers in a 26-state area. The classroom observation, that is, operational explication phase, was concerned with describing the relations of teachers' attitude scores to each other, to classroom ratings, to biographical data, and to pupil attitudes toward certain interpersonal problems of adolescents. Data for this latter phase of the study were collected from a small stratified random sample of 85 Minnesota homemaking teachers and the pupils in one specified class of each teacher. Certain data on interrelations among the attitudes studies and on the relations of these attitudes to biographical characteristics were taken from the normative samples. These latter data were used to help describe the meanings of the attitude scores in terms of biographical data and other observables; thus they contributed to what one may term the operational explication of each attitude score.

The phase of the study dealing with development of instruments is described in this chapter, the other two phases are described in the succeeding chapters. During the first year and a half of the project major attention was given to the development of five attitude inventories for teachers, one for pupils, and a list of criteria and observable evidences of effective classroom activities. The following sections of this chapter describe the development of these instruments and a biographical data form for teachers.

Criteria of Classroom Effectiveness

An observation form entitled Criteria of Classroom Effectiveness for Homemaking Teachers was developed for use in assessing the quality of the learning situation maintained in homemaking classes. The criteria are, in part, an adaptation to home economics of certain characteristics which other research has indicated are related to teaching effectiveness. The following sources served as bases for statements: the Teacher Evaluation Record[1]; teacher competencies suggested by Raths;[2] Cattell's variables describing the personality sphere;[3] Ryan's generalized descriptive statements of the critical behaviors of teachers;[4] Symonds' characteristics of effective teachers based on pupil evaluation;[5] and Hatcher's Characteristic Differences Among Homemaking Teachers of Varying Proficiency.[6]

A list of teacher competencies which had been developed over a period of years by the Home Economics Education faculty of the University of Minnesota provided an additional resource. Examples of observable indications of effective classroom teaching were obtained by means of an open-end questionnaire administered to 50 homemaking teachers enrolled in the 1957 summer session at Iowa State University and the University of Minnesota. Later, a brainstorming session by a group of teacher-educators in home economics elicited additional suggestions of activities which were specific to high school homemaking classes.

From this combination of sources, 33 criteria which seemed pertinent to the maintenance of an effective classroom learning situation were submitted to a jury for rating on a nine-point scale ranging from 'should be omitted' to 'crucial'. Each respondent was encouraged to add additional criteria as well as to make suggestions on content, form, and proposed rating. The range of mean ratings of items was 5.00 to 7.77 with a mean of 6.99. Revisions were made on the basis of jury members' suggestions and on ratings which represented majority thinking.

---

[1] Dwight E. Beecher, The Teaching Evaluation Record (Syracuse: Syracuse University Press, 1953).

[2] Discussions with Louis E. Raths, Then Professor, Ohio State University, summer 1944.

[3] R. B. Cattell, "The Description of Personality III: Principles and Findings in a Factor Analysis," American Journal of Psychology, 58 (January 1945) 289-310.

[4] David G. Ryan, "The Investigation of Teacher Characteristics," The Educational Record, 34 (October 1953) 374.

[5] Percival M. Symonds, "Characteristics of the Effective Teacher Based on Pupil Evaluations," Journal of Experimental Education, 23 (June 1955) 289-310.

[6] Hazel Hatcher, Characteristic Differences Among Homemaking Teachers of Varying Proficiencies (Lansing, Department of Education, Michigan State College and Board of Control, State Department of Education, Michigan, 1944).

The jury was composed of specialists whose work centered on curriculum, evaluation, and administration in home economics education. It included the following people whose positions at the time of the study are given:

Miss Edna Amidon, Home Economics Branch, United States Office of Education
Mrs. Clara Brown Arny, Professor Emeritus, Home Economics Education, University of Minnesota
Dr. Sara Blackwell, Professor, Home Economics Education, Cornell University
Dr. Hazel Hatcher, Professor, Home Economics Education, Pennsylvania State University
Miss Rena Hodgen, State Supervisor, Home Economics Education, Illinois
Dr. Ruth Lehman, Professor, Home Economics Education, Ohio State University
Miss Rosa Loving, State Supervisor, Home Economics Education, Virginia
Dr. Mattie Pattison, Professor, Home Economics Education, Iowa State University
Mrs. Dorothy Schnell, State Supervisor, Home Economics Education, California
Dr. Ival Spafford, Consultant in Home Economics Education, Ohio
Dr. Maude Williamson, Professor Emeritus, Home Economics Education, Colorado State University

The revised form of the observation schedule, entitled Criteria of Classroom Effectiveness for Homemaking Teachers, was printed on a four-page fold, the content of which is reproduced in Appendix A. This form lists 32 criteria classified into three groups, 12 describing characteristics of the teacher, nine specifying qualities of things the pupils do in the classroom, nine indicating the degree to which the learning experiences function in furthering certain long-range pupil developments, and two describing how the physical arrangement of departmental furnishing appears to serve desirable pupil learnings. Immediately following each criterion statement is a series of phrases entitled indications which specify a number of possible observable clues for helping observers see evidences of the degree to which the specified criterion is met in a particular class visited.

Observers who used this schedule indicated the degree to which each criterion was met by writing for each a number between zero and five or an x to indicate lack of opportunity to observe. Directions indicating the interpretation of each numerical rating were carefully specified in the introductory section of the observation schedule.

Selected homemaking teachers in the seven states of the Central Region, one of the administrative areas designated by the U. S. Office of Education, were invited to participate in the first phase of the study. These states represented populous as well as sparsely settled areas with the consequent differences between agricultural and industrial orientation. The state supervisors of home economics education in the selected area were asked to identify a given number of highly able classroom teachers and a corresponding number of other teachers. No effort was made to obtain a comprehensive assessment or evaluation of any teacher since only the classroom situation was considered relevant to the criteria specified in this study. The number of teachers from each state was proportional to the number of full-time homemaking teachers in reimbursed secondary school homemaking departments.

Supervisors were requested to visit, if possible, each selected teacher and use the Criteria of Classroom Effectiveness for Homemaking Teachers as a basis for the observation and conference. To facilitate observation, a small card on which the criteria were listed was provided in addition to the 8½ x 11 inch folder.

A letter was sent to each homemaking teacher in the sample giving information about the study and requesting her participation. The teacher's responsibility was to complete a biographical data sheet, take a battery of attitude inventories, and give a pupil relationship inventory[7] to one ninth-grade class. A number of "follow-up" letters and postal cards were sent to those teachers who were not prompt in completing the several attitude inventories. By the close of the 1957-58 school term complete and usable responses were obtained from 278 homemaking teachers, half of whom were selected as meeting the 32 Criteria very well. The responses of these 278 teachers to the teacher attitude items provided the item-analysis data used in determining the scoring weights of plus one, minus one, or zero for each response of those items which were judged sufficiently discriminating to keep in the revised forms of the inventories and be used in the second and third phases of the study.

Development of the Teacher-Attitude Inventories

This section of the report describes the several steps taken in the development of five attitude inventories for teachers of secondary school homemaking classes. Although there were minor variations in the procedure used for each inventory, the following types of activities constituted a general pattern. The two project directors, the research assistant, Jean Fackler Pinkerton, and two or more other graduate students composed the central research team. Much indispensable consultative assistance was given by other University of Minnesota faculty members and professional personnel in the Minnesota State Department of Education Home Economics Service, and in the public schools.

---

[7] The pupil inventory form and teacher attitude inventories are described in subsequent sections of this chapter.

The first step consisted of the clarification of the specific components or aspects of attitude which were to be included in any given inventory. For example, the attitude toward Profession was assumed to include the following five major aspects each of which was specified further in greater detail: attitude toward the curriculum, classroom responsibilities, professional improvement, vocational administration, and nonclassroom responsibilities. This procedural step was accomplished by means of discussions among team members, individual judgments on suggestions, consultations with other professional personnel, and reference to related research. Many arbitrary decisions were made in this stage of the work. Lists of the aspects of attitude included in each inventory are given on pages 24-25.

Next, the items were written and put through a succession of individual and group criticisms and revisions. Each of the team members received copies of all items and individually considered the six following questions regarding each item:

1) Is the statement clear and free from meaningless cliches?

2) Does the statement have a striking negative or positive appeal? (Neutral items seemed less useful since responsents could register a neutral position by marking an undecided response to both positive and negative items.)

3) Is the statement specific enough to be free from an "it depends on the situation" reaction?

4) Does the statement specify one and only one point upon which disagreement or agreement is likely to be based?

5) Does the statement belong in the attitude inventory for which it is suggested?

6) Does it seem likely that disagreement or agreement with the statement will distinguish teachers who maintain desirable learning situations from other teachers?

Each team member applied these criteria to each suggested item and marked by code any items judged inadequate in any respect. At weekly meetings of the team, items judged inadequate by any member were discussed and revised, accepted or discarded, in accordance with the group decision.

This step yielded a "try-out" form of the inventory which was administered to and criticized by seminar groups of students in appropriate professional courses.

The revisions based on these student criticisms and operational shortcomings resulted in a trial form of the inventory which was administered by mail to 42 Minnesota non-vocational secondary school homemaking teachers in a pilot study of the usability of the whole battery of inventories and the procedural directions to participants. Experimental forms of five teacher attitude inventories were prepared on the basis of the foregoing preliminary steps. These forms were not designated by titles other than initial letters for identification purposes though each form contained interrelated items assumed to be relevant to certain aspects of the profession of secondary school teaching of homemaking. These experimental forms were designated as P, C, SC, F and Sm and contained 146, 149, 148, 174, and 200 items respectively. The list below provides a content classification of the items of these inventories.

Form P - ATTITUDE TOWARD THE PROFESSION

Attitude toward the curriculum breadth and range of subject matter, basis for instructional goals, overlap with other subjects	18 per cent
Attitude toward classroom responsibilities, work load, class size, diversity of responsibilities, recruitment and employment	11 per cent
Attitude toward professional improvement standards of the profession, relation of men to women in the field, advancement, organizations, and meetings	26 per cent
Attitudes toward vocational administration	14 per cent
Attitudes toward other aspects of the program requirements, preparation, organization of job, pay, vacations, teacher sterotype and personal contacts, teaching as a profession	31 per cent

Form C - ATTITUDE TOWARD THE COMMUNITY

Attitude toward parents' concerns instructional goals, pupils' progress	23 per cent
Attitude toward community resources business and other public places, speakers, parent advisory groups	12 per cent

Attitude toward community contacts parent-school visits, home visits, open house, adult education, participation in organization	31 per cent
Attitude toward community-department relations, community demands on teachers' time, use of facilities	8 per cent
Attitude on public relations criticisms of school, restrictions on teacher, responsibilities for public relations activities	23 per cent
Attitude toward different groups	3 per cent

Form F - ATTITUDES TOWARD FAMILIAR INTERPERSONAL RELATIONS

Attitudes toward intra-family relationships parental roles, children's place, character of intra-family relations, relations in minority groups	35 per cent
Introspective personal characteristics and relations level of nervous tension and/or worries, feelings of vindictiveness or competitiveness toward people, personal ethical standards, confidence, stereotyping of minority groups	65 per cent

Form SC - ATTITUDES TOWARD SCHOOL, COMMUNITY AND COWORKERS

Perception of attitudes of administrators and teachers concerning homemaking teachers, the homemaking program, place of homemaking within the curriculum	63 per cent
Attitudes toward other teachers	13 per cent
Attitudes toward extra-class demands on teachers' time student activities, faculty meetings, hot lunch program, exhibits	14 per cent
Attitudes toward pupil-personnel problems counseling, cooperation, slow or rapid learners	11 per cent
Attitude toward contributions of department use of facilities, work with boys, service activities for school	17 per cent
Attitude toward department management load, janitorial service, adequacy of funds	9 per cent

Form S - ATTITUDE TOWARD SUBJECT MATTER

This inventory consisted of 100 groups of four brief statements of activities which were within the experience to most homemaking teachers. The respondent was directed to make two choices among the four activities and to select the one she would like most and the one she would like least. In each group one reflected an interest in management; a second described an artistic aspect; a third dealt with a social contact, or interpersonal interaction; and the fourth concerned the performance of a manual skill. Thus, according to this scheme, the respondents' preferences in each of the 100 groups could be classified.

Though the above paragraph describes the general plan for developing the items, specific keys for each of the indicated types of interests were not empirically investigated in other than small and inadequate pilot studies. An intriguing research remains to be done in describing further in these specified terms the subject matter interests of teachers.

Item Analysis of Attitude Responses

The next step in the development of the teacher attitude inventories consisted of collecting item analysis data from two comparison, or criterion groups[8] of homemaking teachers selected from inservice personnel in seven states in the Central Region. Any item response which showed a difference in the percentage of response in the two criterion groups sufficiently great to be judged significant at the ten per cent level of probability or lower was retained in the final form except for a relatively small number of items. When a response was given more frequently by the criterion group selected for superiority of the teachers' classroom work, this response was henceforth scored plus one, whereas a minus one was assigned when any response was given less frequently by this group. Those item responses which were answered by both groups with equal frequency were scored zero, while those items for which none of the possible responses discriminated between the two criterion groups were omitted from the final attitude inventory form.

The following exceptions constitute the departures in practice from the above general rule for determining the item response scoring. When the undecided category was the only response that discriminated between the two groups the item was omitted if a greater percentage of the superior group was undecided. It was assumed that such an item showed rather weak evidence of usefulness. Only a small number of items were lost by the operation of this rule. A second basis for rejecting items was the inability of the team members to agree on a rationale underlying the scoring weights assigned to the different responses to a single item. Thus only rarely was a pattern such as (+1, 0, 0, 0, +1) accepted for scoring the five possible responses to any item, since this indicated that both strong agreement and strong disagreement were on the same end of the attitude continuum. The few items indicating this sort of scoring pattern were omitted.

---

[8] The description of the process by which these groups were selected is given earlier in this chapter.

A careful consideration of the item analysis data on the 817 items in the five experimental forms and the 150 items of the Minnesota Teacher Attitude Inventory[9] was completed in the eight months immediately preceding February 1959, when the final CP form was prepared. This form consisted of the 285 items selected from the 817 in the experimental forms P, C, SC, and F. Of the 285 items, 264 were discriminating enough to be scored. The 264 items were distributed as follows:

Attitude toward profession	83
Attitudes toward community	80
Attitude toward school-community	60
Attitudes toward familiar interpersonal relations	41

At this time a revision of form S was also prepared. The item analysis data on this form provided the information necessary for developing a scoring key based on the relative frequency of each preference in the two criterion groups of in-service homemaking teachers. Such a key was developed, but all items were retained in the revised form since nearly every group of four activities had at least one preference that was discriminating. In addition, the item analysis data provided information on the relative acceptability level of each of the four activities in the 100 groups. In 29 groups the response distributions among the four choices were so uneven that revisions were made and 29 new items were added following the original ones in the revised inventory, the total consisting of 129 groups of four activity descriptions. Data from these new items have not been included in the current study.

Pupil Relations Inventory: What Would You Do

A pupil relations inventory entitled "What Would You Do" was developed to assess adolescent pupils' ability to recognize mature responses to problems of interpersonal relations. The initial form of this inventory consisted of 36 descriptions of selected interpersonal and social relations problems. Following each problem description, questions were asked such as: What would be your feeling about Mary, an unattractive new girl without friends who finds fault with her new school? What would you do if your mother prepared a casserole for dinner and you disliked the contents? What would you do if you had a date with a shy boy who did not keep the conversation going? This inventory form contained 70 questions associated with the 36 problem descriptions.

---

[9] Walter W. Cook et al. The Minnesota Teacher Attitude Inventory (New York: Psychological Corporation, Form A, 1951).

This free response questionnaire was administered to a group of 78 beginning freshman girls enrolled in home economics at the University of Minnesota. The papers in a random sample of 25 were read independently by two raters using a +1, -1 or 0 score for each answer according to whether the response was considered mature, immature, or neither. The item scores were added to give a total score for each student paper. The product moment correlation coefficient between the two raters' scores on the same papers was .98 and the difference in mean .69. The remaining 53 papers were divided between the two readers, and each paper was scored by only one. The 78 papers were then divided into three groups of 26 based on the total score assigned on the 70 responses.

A multiple-choice questionnaire was developed by selecting eight responses from the students' papers as choices for each of the 70 questions. The eight responses were selected to represent various levels of maturity of response to the problematic situations. The selections were based on the research workers' judgments and were guided by the total score on the students' papers which were used as sources. In general, two responses were selected from each of the extreme thirds and four from the middle third.

This experimental multiple-choice form was administered to 70 eighth grade pupils, to 41 seventh graders, and to 143 University of Minnesota freshmen in home economics. An item analysis was run on the responses of these groups to find which three of the choices for each item was used least and to determine which responses were chosen relatively more frequently by the older students.

On the basis of this item analysis a multiple-choice inventory form, consisting of 50 questions with five possible responses for each, was prepared. The 50 selected questions dealt with 27 of the original 36 problems. This new and final form of the inventory was administered to several groups of homemaking pupils in selected high schools in the Twin City area, 71 twelfth graders and 203 in the ninth grade. An item analysis of these responses provided the basis for specifying the more mature choice or the positive direction of scoring. Thus a choice was scored plus one if the percentage of twelfth graders choosing the given response was significantly greater (at the ten per cent level or less) than the percentage of ninth graders making the same selection. It was further required that the scored choices should have previously shown a discrimination between the college freshmen and the junior high school pupils' responses. Similarly, certain item choices were scored minus one if they were selected by a significantly higher percentage of the ninth graders than of the twelfth graders and also discriminated between the responses of the junior high school pupils and the college freshmen. In no question was more than one choice scored plus one or more than one scored minus one. There were 35 choices scored positively and 13 scored negatively. Hence, in certain items there was one choice scored positively and another scored negatively.

This pupil problem questionnaire was administered to one class of each teacher in the two criterion groups selected from six states of the Central Region. Table 1 shows the class means of a random half of these teachers for pupils at different grade levels. Tests of significance of the difference in means of classes in the two criterion groups show that the differences for ninth graders and for the total group were significant but those for the other grade levels were not.

Table 1 What Would You Do class means for pupils of teachers in two criterion groups selected from the Central Region

Crit.	Ninth Grade			Tenth Grade			Advanced			Total		
Group	N	M	Sd	N	M	Sd	N	M	Sd	N	M	Sd
A	503	11.99	4.7	147	12.61	4.6	74	12.42	5.3	724	12.16	4.7
B	752	10.83	4.9	95	11.88	4.5	23	12.83	4.7	870	11.01	4.9

These small differences in the means of the pupils in the two criterion groups were considered only weak evidence of the usefulness of this pupil questionnaire in assessing the results of a desirable homemaking program. Although the distribution of total scores on the Criteria was platykurtic, a product moment correlation coefficient was computed. For the 199 Criterion group teachers who had ninth grade pupils, the correlation between the mean score for the pupils and the Criteria score was .21. This indicated only a low relationship but was encouraging enough to warrant the trial of the "What Would You Do" in the classroom observation phase conducted during the following year. The results of this second year study, however, were disconcerting since the mean pupil "What Would You Do" score was not significantly correlated with either the classroom ratings or any of the attitude inventory scores. Such results indicate that this pupil relations inventory "What Would You Do" needs considerable improvement before further use is warranted.

The Biographical Data Sheet

The biographical questionnaire used in the first phase of the study consisted of 67 items relative to (a) the teacher's participation in activities for professional development, recreation, personal growth, and community service; (b) the demands of the particular teaching position and the specific characteristics of its setting; and (c) the teacher's reaction to her working conditions, to supervision, and to the community's opportunities and demands. Suggestions for the specific items were derived from previous unpublished research dealing with homemaking teachers' responses to the *Minnesota Teacher Attitude Inventory*, from other research such as the national study of teacher satisfaction,[10] and from the objectives of the current study.

When the responses of the 278 teachers providing data for attitude item analysis became available, the results showed that a small number of items were not useful. Certain items were revised and some were omitted from the data sheet used in the second and third phase of the study. The content of the revised form containing 55 items is given in Appendix A.

---

[10] Home Economics Research Committee, loc. cit.

CHAPTER III

THE NORMATIVE PHASE

The Normative Population, Its Stratification and Sampling

The norm population was defined as the ninth grade homemaking teachers in the vocationally approved secondary school departments in the public schools of a certain twenty-six state area.[1] Departments were classified into five strata according to the size of the secondary school faculty in the system. These five strata had, as their respective lower limits, 0, 15, 30, 60, and 300 secondary school teachers.

The plan was directed toward obtaining samples of approximately equal size in each stratum with no regard to classification by state. It was assumed that the distributions of teachers' attitudes of concern in this study would differ less among states than among strata as defined by faculty size. This assumption seemed warranted because of the mobility of teachers and the similarities in preservice teacher preparation programs in the several states. The sampling plan provided means for investigating attitude differences among strata but less information relative to differences among states or regions.

Preliminary estimates of the number of ninth grade homemaking teachers in each stratum were made by studying published lists and State Department directories provided by the 26 state supervisors of homemaking teachers. These preliminary estimates were corrected by requesting a sample of teachers to indicate the size of their school's faculty on a return post card. In this sample survey for defining the strata and requesting cooperation, 88 per cent of the 1297 teachers responded with information about the number of secondary school teachers in their school system and 97 per cent of them agreed to participate. It was assumed that the responses of the others would follow a pattern similar to that of the respondents.

The preliminary estimates indicated that the approximate number of teachers in the strata were respectively 2300, 1300, 1000, 700, and 260. Random samples of schools having vocationally approved homemaking departments with classes for ninth graders were selected from the lists after the schools had been classified into strata based on faculty size for the previous year. The random samples drawn were of sizes 271, 268, 268, 258, and 232 for the five strata. In the first two strata it was assumed that each school had only one homemaking teacher with major responsibility for ninth grade pupils. This teacher was asked to report the size of the faculty and to participate in the attitude study. In strata three and four the ninth grade homemaking teacher whose last name came earliest in an alphabetical arrangement was asked to participate in these surveys. In the last stratum every ninth grade homemaking teacher was asked to participate.

---

[1] The states included in this defined area are listed on page iv.

Responses from the initial letter indicated that 25 teachers in the five samples were not members of the defined population. Some of these were teaching in private schools, while others were teaching exclusively below or above the ninth grade level. A small number of the departments were not vocationally approved for the 1958-59 school year. When these 25 cases were subtracted, the sample sizes became 264, 265, 266, 251, and 226 respectively for the five strata as tentatively determined on the basis of published information on school size for the previous year, 1957-58.

The sampling fractions for the several strata were approximately 1/8, 1/5, 1/4, 3/8, and 8/9. The teachers' responses indicated that the preliminary classification into strata was correct in 66 per cent of the cases. Provisions were made, however, for correcting the discrepancies in the classification of schools.

The last column of Table 2 shows the number of respondents from each of the five random samples drawn from the five tentative strata as determined by preliminary information. Column 1 shows that 25 teachers were tentatively classified in the category II who should have been included in the category I. Since the sampling fraction in category II was 1/5, it was estimated that 125 teachers were tentatively classified in stratum II who should have been in stratum I. By considering the other entries in column 1 and the respective sampling fractions, it was estimated that 24 + 8 + 3 additional teachers should have been classified in stratum I. By adding 125, 24, 8 and 3 an estimate was obtained of the number of teachers tentatively classified in other strata who should have been classified in stratum I. By combining the entries in row one, it was estimated that 77 times eight (the reciprocal of the stratum sampling fraction) fewer teachers should have been classified in stratum I. Hence the revised estimate of the number of teachers in stratum I should involve an increase by the number of respondents in column 1 multiplied by the reciprocal of the strata sampling fractions and a reduction by eight times the entries in the last four cells of row one. When this adjustment (-456) was increased by 1/9 to provide for non-respondents, the revised estimate of the population number in stratum I was 1793, that is, approximately 1800.

Table 2. The number of respondents in homemaking teacher samples from a 26-state area classified by size of secondary school faculty

Tentative Strata			Actual Faculty Size Class				
		I	II	III	IV	V	Total
Faculty Size		0-14	15-29	30-59	60-299	300+	Response
I	0-14	163	66	9	2	---	240
II	15-29	25	171	33	14	---	243
III	30-59	6	38	133	43	9	229
IV	60-299	3	12	43	120	48	226
V	300+	3	8	13	11	165	200
Total		200	295	231	190	222	1138

The revised estimates of the number of teachers in the other four strata, obtained in a similar manner from the entries in the other columns and rows, were 1701, 971, 686, and 399. Since the original strata population estimates were accurate to two significant digits, estimates were rounded to 1800, 1700, 970, 690 and 400. These revised figures provide estimates of the numbers of teachers in these five strata in the 26 selected states.[2]

In the survey in which the teachers classified their school size, the respondents were asked to indicate their willingness to participate in the normative phase of the study. Approximately 1100 of 1272 asked (over 86 per cent) agreed to participate. When the attitude inventory forms were sent to the teachers several months later, however, 108 of these did not respond, many for very acceptable reasons.

Table 3 shows the number of teachers in each tentative stratum classified according to the amount of data included in this report. The lower five lines of this table provide additional information about the 290 cases classified as "non-respondents" in line four. Some of these cases are not truly "non-respondents" since certain ones did provide some data, and information regarding others was available from other sources.

---

[2] Total number of Day and Day-Unit Vocational Education Programs in Home Economics for these 26 states was given as 5160 for fiscal year 1957 (i. e. 1956-57 school term.) See Table 5. Digest of Annual Reports of State Boards of Vocational Education. U. S. Office of Education, Washington, D. C. 1958.

Table 3. Number of homemaking teachers in selected samples from 26 states classified by tentative school size strata and amount of data available

	Tentative School Size Strata					
	I	II	III	IV	V	Total
No. in Population Contacted	264	265	266	251	226	1272
No. Providing Complete Data	144	157	154	140	117	712
No. Providing Partial Data	61	57	52	55	45	270
Non-respondents	59	51	60	56	64	290
*No response to original Contact	31	25	39	32	32	159
*Data Provided by Sup'r	16	13	7	8	13	57
*No Information after First Response	8	11	11	8	13	51
*Refused to cooperate	3	1	1	5	4	14
*Unusable Returns	1	1	2	3	2	9

*Individuals in lines 5, 6, 7, 8 and 9 are all included in line 4.

Table 4. Number of homemaking teachers in selected samples from 26 states providing information on school size classified by school size strata and amount of data provided

	Actual School Size Strata					
	I	II	III	IV	V	Total
Responded to First Contact	200	295	231	190	222	1138
No. Providing Complete Data	119	190	157	115	131	712
No. Providing Partial Data	49	71	55	42	53	270
No. Excluded from Population	7	3	2	7	6	25
Refusals & Unusable Returns	4	2	3	8	6	23
Non-respondents	21	28	14	18	27	108
Data Provided by Sup'r	15	15	4	8	15	57
No Information after First Response	6	14	10	10	11	51

Table 4 shows the number of teachers who responded to the initial inquiry regarding school faculty size and willingness to participate in the attitude study. These respondents are further classified in Table 4 according to the actual school size strata and the amount of data for each teacher included in this report.

During the school year 1959-60 information was sought on non-respondents through the respective offices of the State Supervisors of Homemaking Education. Only a minimum of information was requested since these officials had previously given very generously of their time and cooperation. Data on four biographical items were selected on the basis of indications of their pertinence from previous research. Information was made available on 57 of the 108 non-respondents regarding whether the teacher supervised student teachers in 1958-59, the number of years of teaching experience, the degrees earned, and whether the teacher had attended and participated in the program of a regional or state conference for vocational homemaking teachers.

The information obtained about these non-respondents did not indicate serious bias in the responding group on these four biographical characteristics. Tables 5-8 show the number of respondents and those non-respondents for whom data on these four items were available through the courtesy of the respective State Supervisors' offices. Tables showing the same data classified further by School-Size Strata are given in Appendix B, Tables B-1 to B-4.

Table 5. Total of five school-size samples of homemaking teachers classified by status of responses and service as supervisors of student teachers

	Respondents	Non-Respondents*
Supervised Student Teachers in 1958-59	183	10
Did Not Supervise Student Teachers	775	45
Information not Provided	24	53
Total	982	108

Table 6. Total of five school-size samples of homemaking teachers classified by status of responses and participation in regional or state conferences for homemaking teachers

Regional or State Conference	Respondents	Non-Respondents*
Participated in Program	403	21
Attended with Participation	415	15
Did not Attend	149	15
Information not Provided	15	57
Total	982	108

*Information provided through respective State Supervisors.

Table 7. Total of five school-size samples of homemaking teachers classified by status of responses and degrees earned

Degrees Earned	Respondents	Non-Respondents*
Master of Arts or Higher	239	10
Less than M. A. Degree	729	45
Information not Provided	14	53
Total	982	108

*Information provided through respective State Supervisors.

Table 8. Total of five school-size samples of homemaking teachers classified by status of responses and length of teaching experience

	Respondents	Non-Respondents*
Less than one year	67	2
One to less than three years	115	5
Three to less than five years	122	10
Five to less than ten years	218	11
Ten to less than twenty years	289	10
Twenty years or more	163	16
Information not provided	8	54
Total	982	108

*Information provided through respective State Supervisors.

On item 40 of the Teacher Data Sheet the respondents indicated whether or not they supervised student teachers during the 1958-59 school term. In this group 81 per cent of those responding to this item indicated they had not acted in that capacity, while State Supervisors reported that 82 per cent of the non-respondents were so classified.

The responses to item 28 indicated which respondents participated in the program of a state or regional conference for homemaking teachers. Comparisons indicated that 42 per cent of the respondents and 41 per cent of the non-respondents participated in such programs. Comparison on attendance, however, showed that 29 per cent of the non-respondents (actually 15) but only 15 per cent (149) of the respondents did not attend such a conference during the 1958-59 school year. These latter percentages are significantly different.

Responses to item 55 indicated that 75 per cent of the respondents had less than an M. A. degree, while 82 per cent of the 55 non-respondents were so classified by the State Supervisors. This difference in percentage is not large enough to be considered significant for the numbers involved.

In regard to the number of years of teaching experience, however, some discrepancy was found between the respondents and the 54 non-respondents for whom the State Supervisors reported. Actually the median years of experience for the two groups did not differ greatly, 9.2 versus 9.6 years, though 19 per cent of the respondents and only nine per cent of the non-respondents had less than three years of experience. Likewise, 30 per cent of the non-respondents were reported to have had 20 years or more of experience, while only 17 per cent of the respondents classified themselves in this category. The difference in sources for this information would explain some discrepancy in the data but probably not this much. Hence it seems that the respondent group may not have a sufficiently large representation from the group of teachers with twenty or more years of experience.

A further study was made of the question of bias in the respondents who provided all the data requested. Although only 712 teachers responded to all of the attitude inventories, another group of 270 completed the biographical questionnaire entitled Teacher Data Sheet. Tables B-5 to B-25 in Appendix B show the frequencies of the responses to 21 of the biographical items given by those 270 and the 712 respondents who completed all forms. In each of these tables five Chi-Square values are given for contrasting the item responses of these two groups of respondents within the school-size strata. Of the 105 Chi-Square values computed, only one was significant at the one per cent level and seven between the one and five per cent levels.

The one item to which responses differed the most was that concerning the teachers' relation to the principal. In school-size stratum four a much lower percentage of those providing only partial data indicated that their principals gave them suggestions when they asked for them, and a much larger percentage indicated their principals "leave them alone." In school-size stratum five the responses to this item yielded a Chi-Square value whose probability lay between two per cent and five per cent. This difference, however, appears to reflect largely the greater percentage of the partial respondents who indicated that their principals help them work out problems. The percentages of respondents giving this answer was nearly the same for strata four and five, 26 per cent of the complete respondents and 42 per cent of the partial respondents.

There were two other items for which the frequencies in two strata were discrepant enough to yield Chi-Square values whose probabilities lay between five per cent and one per cent. These items were the ones dealing with college honors (Table B-20) and the time of life when the respondent decided to become a teacher (Table B-22). When the five Chi-Square values for the five strata were added, these two items both had probabilities between five per cent and one per cent. In stratum one, a higher percentage of the partial respondents earned honors but in stratum three a lower percentage did so. Actually for this item and these strata the percentages showed that the partial respondents in one stratum were distributed much like the complete respondents in the other strata.

When the percentage frequencies were computed for the data in Table B-22, it was observed that a smaller proportion of the partial respondents in both strata two and five indicated they had "always wanted to be a teacher" rather than one of the other possible responses. Noting that the discrepancies in relative frequencies were not large enough to be judged significant at the one per cent level and that the response choices possessed a certain degree of ambiguity, it seems justified to conclude that this item provided only weak evidence of bias in the responding group.

The above three paragraphs are descriptive of the very few discrepancies in the frequency distributions of responses to the items of the Biographical Data Sheet. The very low proportion of significant discrepancies in responses indicated that the group of 712 complete respondents did not constitute a seriously biased sample of the population even though there is rather weak evidence of bias in some respects.

Reliability of Homemaking Teacher Attitude Inventory Scores

On page 27 is found the content classification of the items of the final (CP) form of the teacher attitude inventory developed during the first year of this project. Four part-scores were derived for each teacher on the basis of her replies to 264 items of this form. These scores, designated as Sc, C, P, and F[3] were based on 60, 80, 83, and 41 items respectively.

There were five possible responses (strongly agree, agree, undecided, disagree, or strongly disagree) from which the respondent selected her answer to each of the first 240 items. Each of the possible responses to each item was keyed as +1 or -1 depending upon whether the item-analysis data had indicated the response was more or less frequently given by those in the selected criterion group of 139 teachers chosen from six states of the Central Region. The remaining item responses which were neither more nor less characteristic of the selected teachers were keyed zero.

---

[3] These part scores refer to attitudes toward: SC, the school community and coworkers; C, the community; P, the profession and F, certain familiar interpersonal relations.

Only two responses were possible to each of the last 45 items on form CP. The key on the 41 discriminating items was determined in a corresponding fashion using +1 for responses given more frequently by the teachers in the selected criterion group and -1 for responses given less frequently by this group.

In addition, the homemaking teachers were given two scores on their responses to the items of the Minnesota Teacher Attitude Inventory,[4] a self-report form validated extensively against elementary school teachers' ability[5] to maintain good rapport with pupils. One score was the usual one for the standardized form of the Inventory, and a second score was derived from 75 items selected on the basis of responses of the teachers in the Central Region criterion or comparison groups described in Chapter II. This key for the MTAI was developed in the same manner as the keys for the first 240 items of form CP. This core is referred to as the HTAI.

A seventh attitude score was derived for each teacher on the basis of her preferences for activities listed in form SS, Attitude Toward Subject Matter. Each teacher responded to these items by selecting from each group of four activities the one she would most prefer and the one she would least prefer. The key used in this study was called Sm to indicate subject matter. Those preferences, either most or least, which were selected by a significantly greater proportion of those in the selected comparison group were scored plus one, while those preferences selected by a significantly lower proportion of this group were scored minus one. Of the one hundred and sixty responses given to the first 80 items in form SS, scoring weights of +1 or -1 were assigned to 112 items, whereas the other 48 were found not sufficiently discriminating by the item analysis to warrant scoring. These and the other items beyond number 80 were kept in the SS form for obtaining data on a subject matter description of interests of homemaking teachers[6] which is not included in this report.

---

[4] Cook, et al., loc. cit.

[5] Much evidence has been accumulating on other aspects of the validity of the MTAI. See for example Cyril J. Hoyt and W. W. Cook, "Predictive Validity of MTAI" Journal of Teacher Education: March 1957 and W. W. Cook and C. J. Hoyt, "The Stability of MTAI Scores During Two to Seven Years of Teaching," Journal of Teacher Education, September 1960.

[6] See p. 26 in the Chapter II relative to Development of the Teacher Attitude Inventories for futher discussion of this point.

Data on an internal consistency reliability coefficient of these seven scores were analyzed, and the results are presented below. This reliability coefficient[7] shows the proportion of the variance among the teachers' scores derived from their responses to a particular group of items which can be said to be associated with the underlying attitude variation among these teachers. The remaining proportion of the variance in the scores, often called error of measurement, is due to inconsistencies in responses of individuals to specific items. Thus the agreement or disagreement of any particular person with any particular item is partly a reflection of the general attitude assessed by the other items in the group scored together and partly a reflection of attitudes which are specific to the particular item and which are not positively associated with the general attitude assessed by the whole group of items included in each score. If a large proportion of the variance among the scores of a group of teachers is associated with the general attitude assessed by the whole group of items, the internal consistency reliability of the attitude score is said to be high. The question of the permanence of attitudes was not investigated, though the length of the inventories and evidence from other attitude studies would argue for a relatively high stability of attitudes.

Table 9 gives the internal consistency reliability coefficient for each of the teacher attitude scores based on a sample of 54 respondents from the smallest school size stratum. The coefficients for the other school size groups would probably be slightly more or less than the ones given depending upon whether the variability among the scores in the other groups was greater or less[8] than that in school size I. The reliability coefficients were computed by using the method of analysis of variance[9] described by Hoyt and Stunkard. Tables C-1, 2, 3, 4, 5, 6, 7, 8 in Appendix C show the several sources of variation for each of the attitude scores. Reliability coefficients of the size reported for the new inventory scores are not outstandingly high but are reasonably good for all part scores except for Sc and P. When these two scores were added, the reliability coefficient for the 150 item inventory was .68, slightly higher than either of the parts. When, however, the three scores Sc, P and C were added the reliability coefficient for this 240 item inventory was only .78. Although these three scores are positively correlated with one another (average of .40), C appears to possess an internal consistency higher than that of the combined score. This argues that it would be worthwhile to attempt improvement in reliability by keeping the items in two groups, at least, one for a score on C and another for a combination of the other two scores.

---

[7] Cyril J. Hoyt and Clayton L. Stunkard, "Estimation of Test Reliability for Unrestricted Item Scoring Methods," Educational and Psychological Measurement, (1952) 12:756-758.

[8] As noted, tests of homogeneity of the variances among school size groups show that in no inventories do the variances differ from group to group.

[9] Cyril J. Hoyt and Clayton L. Stunkard, loc. cit.

Table 9. Coefficients of reliability for teacher attitude inventory scores based on a sample of respondents from schools in twenty-six states with less than sixteen secondary school teachers

Attitude Inventory		No. Items	Reliability Coefficient
School Comm. and Coworkers	Sc	60	.51
Profession	P	90	.62
Community	C	90	.83
Familiar Interpersonal Rel.	F	41	.84
Subject Matter	Sm	112	.79
Minn. Teach. Attit. Inv.	MTAI	150	.91
Home Ec. Teach. Part Score on MTAI	HTAI	75	.82
Sum Sc, P and C	PP	240	.78

Intercorrelations Among Attitude Inventory Scores

Table 10 shows the product moment correlation coefficients among the seven teacher attitude scores of the inservice samples drawn for the norm data. Since the samples were drawn randomly within school size strata, the sums of squares and products for the correlations in Table 10 were based on the deviations from their respective school-size stratum sample mean.[10] This procedure prevents an unwarranted inflation of the coefficients due to differences which might exist among the sample means.

The signs in this correlation table provide a basis for recognizing two positively interrelated sets of attitude scores. Thus, Sc, P and C have positive intercorrelations with each other, while the other four, Sm, HTAI, MTAI and F have positive interrelations but have negative relations with those in the other set. The correlation between HTAI and MTAI is high because both scores are based on responses to some common items. The former was based on 75 selected items included in the 150 items of the standardized MTAI. From the sampling point of view all of the sample estimates of correlations in Table 10 can be said to be significant at the one per cent level except those of involving subject matter (Sm) with Sc, P and C. Hence, the preference for the selected type of subject matter can be said to be unrelated to the attitudes toward coworkers and the school, the profession and the community.

---

[10] See E. F. Lindquist, Design and Analysis of Experiments in Psychology and Education, (Houghton Mifflin & Co. 1957) p. 320 for discussion of the logic of this computational procedure.

Table 10. Intercorrelations among seven teacher attitude scores based on sum of five within school size strata co-variances and variances of samples composed of 712 cases from schools in twenty-six states

SC	P	C	SM	HTAI	MTAI	F*
School Community (SC)	.401	.329	-.058	-.113	-.202	-.274
Profession (P)		.516	-.054	-.158	-.315	-.346
Community (C)			-.067	-.229	-.350	-.342
Subject matter (Sm)				-.116	.145	.141
Homemaking Teacher Atttitude Toward Children (HTAI)					.794	.344
Minnesota Teacher Attitude Inventory (MTAI)						.430

*Attitude Toward Familiar Interpersonal Relations

Comparison of Attitude Scores Among Teachers in the Five Strata

As indicated above, the normative population of homemaking teachers of ninth graders was classified into five strata based on the size of the school system of which their department was a part. The number of secondary school teachers as reported by the homemaking teacher characterized the size of the school system. The divisions between the five strata were 15, 30, 60 and 300 teachers. As indicated earlier, the 26 state area selected contained approximately 5550 vocationally approved departments serving ninth grade pupils. The rather rough estimates obtained in this study indicated that approximately 1800, 1700, 970, 680 and 400 departments fell into each of these strata.

The sampling procedure used in this study was planned to yield samples of similar sizes from each stratum. Since the published information used for defining school system size could not have been made current without undue apportionment of efforts and since response rates were not equal, the samples of respondents who submitted complete data were 119, 190, 157, 115, and 131 from the five strata arranged from small to large systems.

This section of the report contains information regarding the attitude scores of these five samples drawn from the 26 state area. In the drawing no attempt was made to provide samples informative to the separate states since all approved departments in each stratum were listed in a sampling frame for each school-system-size. From each of these five lists a random sample of a predetermined number of departments was drawn. Letters were written to enlist the participation of a specified teacher of ninth grade homemaking classes in each of the randomly selected departments. The data reported in this section were derived from the responses of approximately[11] 75 per cent of the randomly selected teachers.

Table 11. Means, medians, and standard deviations on three teacher attitude scores for samples of five school-size strata of the 1958-59 population of ninth grade homemaking teachers in the vocationally approved departments in twenty-six states

Strata Size		School Community	Profession	Community
I	mean	22.12	52.18	46.96
119	median	22	51	47
	St. Dev.	6.1	8.3	8.5
II	mean	22.74	53.29	48.01
190	median	22	52	48
	St. Dev.	5.5	8.7	8.7
III	mean	22.65	53.89	46.75
157	median	22	53	46
	St. Dev.	5.9	8.6	8.7
IV	mean	22.43	52.15	46.38
115	median	22	52	45
	St. Dev.	5.6	8.3	8.7
V	mean	21.82	52.02	44.98
131	median	22	52	44.5
	St. Dev.	6.4	8.2	9.1

Tables 11 and 12 give the means, medians and standard deviations of each stratum on each of the seven teacher attitude scores. Discrepancies of the means from their respective medians indicate that none of the distributions is seriously skewed.

---

[11] Information relative to the respects in which the responding group can be considered an unbiased sample of the population sampled is discussed in the preceding section.

Comparisons were made among the five strata standard deviations on each attitude score. The tests showed a high probability of homogeneity among the variances of the five strata on all attitude scores.

Comparisons were also made among the five strata means on each attitude score. Tables 13 to 19 show the two sources of variation among strata and within strata for the seven attitude scores. The variance ratios (F) calculated in each table indicate that the strata means are probably not different for four of the seven scores, Sc, P, HTAI, and F. The F tests of similarity among the strata means on MTAI and C indicate the probability of equal strata means was two per cent and five per cent respectively. These results were considered in the region of doubt--that is, further investigation of the question is indicated. In the case of the preferential attitude toward subject matter (Sm), it seems warranted to conclude that the equality among strata means is doubtful if not rejected. Inspection of the sample means of Sm and MTAI indicates similar patterns--that is, the teachers in both of the larger systems

Table 12. Means, medians, and standard deviations on four teacher attitude scores for samples of five school-size strata of the 1958-59 population of ninth grade homemaking teachers in the vocationally approved departments in twenty-six states

Strata Size		Subject Matter	HTAI[a]	MTAI[b]	F[c]
I	mean	34.61	50.56	100.84	47.67
119	median	35	50	99.5	47
	St. Dev.	9.1	12.8	33.0	10.2
II	mean	35.26	51.33	99.91	48.50
190	median	35	51	98	49
	St. Dev.	7.8	13.6	34.6	11.2
III	mean	36.75	52.87	105.61	48.55
157	median	37	53	104.5	49
	St. Dev.	8.8	14.0	34.7	10.1
IV	mean	37.63	54.10	110.00	50.35
115	median	37	52	108.5	51
	St. Dev.	8.7	13.2	36.1	11.9
V	mean	37.23	53.15	112.06	50.94
131	median	37	51	110	53
	St. Dev.	8.1	13.6	37.5	10.6

a) Homemaking teachers attitudes toward children
b) Standardized Minnesota Teacher Attitude Inventory
c) Attitude toward familiar interpersonal relations

Table 13. Analysis of variance among school-size strata means on attitudes toward school community (SC)

Source of Variation	d. f.	Sum of Square	Mean Square	F
Among Group Means	4	85.6403	21.41	.88^{a}
Within Groups	707	24,577.0686	34.76	
Total	711	24,662.7089		

a) P (F) $>$ .05

Table 14. Analysis of variance among school-size strata means on attitude toward the profession of teaching (P)

Source of Variation	d. f.	Sum of Square	Mean Square	F
Among Group Means	4	406.6771	101.67	1.42^{a}
Within Groups	707	50,504.9503	71.44	
Total	711	50,909.6279		

a) P (F) $>$ .05

Table 15. Analysis of variance among school-size strata means on attitude toward the local community (C)

Source of Variation	d. f.	Sum of Square	Mean Square	F
Among Group Means	4	734.1555	183.54	2.40*
Within Groups	707	54,130.6746	76.56	
Total	711	54,864.8301		

* P (F) = .05

Table 16. Analysis of variance among school-size strata means on preferential attitude toward subject matter (Sm)

Source of Variation	d. f.	Sum of Square	Mean Square	F
Among Group Means	4	896.49	224.12	3.15*
Within Groups	707	50,303.19	71.25	
Total	711	51,199.68		

* .01 $<$ P (F) $<$ .05

Table 17. Analysis of variance among school-size strata means on homemaking teachers attitude inventory score (HTAI)

Source of Variation	d. f.	Sum of Square	Mean Square	F
Among Group Means	4	1,058.8334	264.58	1.45^{a}
Within Groups	706	128,578.9080	182.12	
Total	710	129,637.2434		

a) P (F) $>$ .05

Table 18. Analysis of variance among school-size strata means on Minnesota teacher attitude inventory score (MTAI)

Source of Variation	d. f.	Sum of Square	Mean Square	F
Among Group Means	4	16, 393. 394	4, 098. 35	3. 31*
Within Groups	706	872, 982. 277	1, 236. 52	
Total	710	889, 375. 671		

* $.01 < P(F) < .02$

Table 19. Analysis of variance among school-size strata means on attitudes toward familiar interpersonal relations (F)

Source of Variation	d. f.	Sum of Square	Mean Square	F
Among Group Means	4	979. 5055	244. 88	2. 09a
Within Groups	707	82, 902. 1069	117. 26	
Total	711	83, 881. 6124		

a) $P(F) > .05$

(between 60-299 and over 300) have higher means on these two scores. In the case of C, attitude toward community, the mean for the sample of the largest stratum is lower than that for the samples of the other four strata. These patterns of sample means seem to conform to expectations.

Tables 20 to 26 give decile scores and means on each of the attitude scores for the teacher samples drawn from the five strata of the 26 state population. The centile scores as given in these tables were rounded to the nearest whole number except for those which are exactly one-half. The means

Table 20. Deciles and means of school-size strata on attitude toward school community

	School System Size Strata					
Centile	I	II	III	IV	V	Total
90	30	29	30	30	29	30
80	27	27	28	27	26	28
70	25	25	26	24	25	26
60	23	23. 5	24	23	23	24
50	22	22	22	22	22	23
40	20	21	21	20	19	21
30	19	20	19	19	17	20
20	16	18	17	17	16	18
10	13	16	15	15	13	15
Mean	22. 1	22. 7	22. 6	22. 4	21. 8	22. 5
No.	119	190	157	115	131	712

have been rounded to the nearest tenth of a raw score point where the next higher tenth was recorded when the division yielded exactly five hundredths. In all of these tables there is considerable uniformity among the corresponding centile scores for the five school-size strata. The largest differences are found in Table 25 dealing with MTAI. For judging the relative position of any individual's score, a user may find the centile scores on the combined group as useful as the five strata sets given in each of these tables. There may be times, however, when it is more informative to note an individual's relative position among teachers from some particular sized system. Hence, it appears that the details given in these tables make the tables useful though one must recognize that the combined group has a far greater proportion of population in the large school systems than in the small systems.

Table 21. Deciles and means of school-size strata on attitude toward profession

	School System Size Strata					
Centile	I	II	III	IV	V	Total
90	64	64	65	62	62	64
80	58	60.5	60	59	59	60
70	56	58	57	56	57	58
60	54	56	55	54	55	56
50	51	52	53	52	52	53
40	49	50.5	51	50	49	51
30	47	47	49	47.5	47	48
20	45	45	46	45	44	46
10	40	41	42	40.5	40	42
Mean	52.2	53.3	53.9	52.1	52.0	52.8
No.	119	190	157	115	131	712

Table 22. Deciles and means of school-size strata on attitude toward community

	School System Size Strata					
Centile	I	II	III	IV	V	Total
90	57	59	57	58	57	59
80	52	54	53	51	52	54
70	51	52	50	48	50	51
60	48	50	48	46	47	49
50	47	48	46	45	44.5	47
40	45	46	43	43	42	45
30	42	43	41	42	40	43
20	40	40	39	39	36	40
10	35	36.5	35	36	33	36
Mean	47.0	48.0	46.7	46.4	45.0	46.7
No.	119	190	157	115	131	712

Table 23. Deciles and means of school-size strata on attitude toward subject matter

	School System Size Strata					
Centile	I	II	III	IV	V	Total
90	47	45	47	47.5	46	48
80	41	42	44	44	43	44
70	39	39	40	42	41	41
60	36	37	38	40	38	39
50	35	35	37	37	37	37
40	31	33	35	35.5	35	35
30	29	31	32	33	32	32
20	26	28	30	31	30	29
10	21	24.5	24	25	26	25
Mean	34.6	35.3	36.8	37.6	37.3	36.3
No.	119	190	157	115	131	712

Table 24. Deciles and means of school-size strata on HTAI

	School System Size Strata					
Centile	I	II	III	IV	V	Total
90	68	69	71	71	72	71
80	61	63	64	65	66	65
70	57	58	59	59	59	59
60	53	54	56	55	56	56
50	50	51	53	52	51	53.5
40	45	47	50	49.5	48	49
30	42	44	47	46	45	46
20	39	40	38	43	41	41
10	35	34	34	37	35	36
Mean	50.6	51.3	52.9	54.1	53.2	52.4
No.	119	190	157	115	130	710

Table 25. Deciles and means of school-size strata on MTAI

	School System Size Strata					
Centile	I	II	III	IV	V	Total
90	143	145.5	156	160	161	156
80	131	129	135	140	144.5	137
70	118	120.5	120	130	133	124
60	109	106.5	111	120	121	115
50	99.5	98	104.5	108.5	110	104
40	89	91	94	98	100	96
30	80	79	86	90	90	86
20	71	69	72	82	79	74
10	56	56	60	61.5	60	60
Mean	100.8	99.9	105.6	110.0	112.1	105.1
No.	119	190	157	115	130	711

Table 26. Deciles and means of school-size strata on attitude toward familiar interpersonal relations

	School System Size Strata					
Centile	I	II	III	IV	V	Total
90	60	61	61	63	61	63
80	55	57	57	59	59	59
70	53	53	53	57	57	56
60	50	51	51	53	55	53
50	47	49	49	51	53	51
40	46	47	46	49	49	48
30	43	43	43	46	45	45
20	39	39	39	41	41	41
10	34	34	33	31	37	35
Mean	47.7	48.5	48.6	50.3	50.9	49.1
No.	119	190	157	115	131	712

Comparison of Attitude Scores by Teaching Grade Level

Tables 27 and 28 contain the decile scores and means on the attitude scores for the teachers classified according to the grade level of the pupils whom they teach. Of the 709 teachers who answered this question, 108 were teaching all their homemaking classes at the junior high school level during the second semester of 1958-59; 289 were teaching only senior high school pupils; and the remainder, 312, were teaching some classes at each level. Here again, the decile scores show considerable uniformity for the three groups of teachers, though the senior high school teachers have higher scores on MTAI, HTAI, F and Sm.

Table 27. Deciles and means on attitudes toward school community, profession and community for homemaking teachers classified by grade level of pupils

	Sch. Community			Profession			Community		
Cent.	Jr. Hi.	Sr. Hi.	Both	Jr. Hi.	Sr. Hi.	Both	Jr. Hi.	Sr. Hi.	Both
90	30	29	29	63	62	64	58	55	59
80	27	27	27	61	58	60	53	52	55
70	25	24	25	59	56	58	50	49	52
60	23	23	24	54	54	56	48	46	50
50	22	21	23	52	52	53	45	45	47
40	20	20	21	50	49	51	43	43	45
30	19	18	20	47	47	48	41	40	43
20	17	16	18	45	44	46	37	38	40
10	14	14	15	41	40	43	34	34	37
Mean	22.5	22.0	23.0	53.3	52.1	53.4	46.2	45.5	48.1
No.	108	289	312	108	289	312	108	289	312

Table 28. Deciles and means on attitude toward subject matter, children and familiar interpersonal relations of homemaking teachers classified by grade level of pupils

	Sm			HTAI			MTAI			F		
Cent.	Jr.	Sr.	Both	Jr.	Sr.	Both	Jr.	Sr.	Both	Jr.	Sr.	Both
90	46	48	46	66	73	69	144	160	146	59	63	61
80	43	43	42	60	66	63	132	144	131	57	59	57
70	41	41	39	57	60	58	120	128	119	53	56	53
60	38	38	37	54	55	55	110	119	111	52	53	51
50	37	36	35	51	52	51	99	108	100	50	51	48
40	35	34	33	49	49	47	95	98	91	47	49	46
30	32	32	31	45	45	44	87	88	82	45	46	43
20	30	28	28	41	40	40	74	72	73	41	41	39
10	25	23	25	36	35	34	54	61	56	35	34	34
Mean	36.9	36.5	35.7	51.7	53.3	51.8	103.0	109.4	101.6	49.3	50.4	47.9
No.	108	289	312	108	289	312	108	289	312	108	289	312

Comparison of Attitude Scores by Length of Teaching Experience

Tables 29 and 30 show the deciles and means on the seven attitude scores for the same teachers reclassified according to the number of years of teaching experience. In this case 135 were in their first, second or third year of teaching, while 249 had three to ten years and 325 over ten years experience. Although these tables show considerable uniformity on each attitude score for the three groups of teachers, the existence of this uniformity is worth observing since certain beliefs may lead one to expect greater differences than were actually observed.

Table 29. Deciles and means on attitudes toward school community, profession and community for homemaking teachers classified by length of teaching experience

	Sch. Community			Profession			Community		
Cent.	less than 3 yrs	3-10 yrs	over 10 yrs	less than 3 yrs	3-10 yrs	over 10 yrs	less than 3 yrs	3-10 yrs	over 10 yrs
90	29	29	30	62.5	64	63	59	58	58
80	26	26	28	59.5	60	59	54	52	53
70	24	25	26	57	57	57	52	49	51
60	22	23	24	54	55	55	50	47	49
50	21	21	23	52	52	53	47.5	44	47
40	20	20	21	50	49	50	45	43	44.5
30	18	19	19	48	47	47.5	43	40	42
20	16	17	17	46	45	45	41	38	39
10	14	14	14.5	42	40	41	36	35	35
Mean	21.6	22.2	23.1	52.9	52.8	52.8	47.9	46.0	46.8
No.	135	249	325	135	249	325	135	249	325

Table 30. Deciles and means on attitudes toward subject matter, HTAI, MTAI and familiar interpersonal relations for homemaking teachers classified by length of teaching experience

	Subject Matter			HTAI			MTAI			F		
Cent.	less than 3 yrs	3-10 yrs	over 10 yrs	less than 3 yrs	3-10 yrs	over 10 yrs	less than 3 yrs	3-10 yrs	over 10 yrs	less than 3 yrs	3-10 yrs	over 10 yrs
90	46	47	46.5	68	71	70	144.5	158	158	62	63	59
80	42.5	42	43	62	63	64	133	137	135	57	59	57
70	39.5	40	41	57.5	59	59	119	121	125.5	55	55	55
60	37	37	39	54	55	55	111.5	112	115.5	52	53	51
50	35	35	37	51	51	52	104	98	106	50.5	51	48
40	32	33	35	47	47	49	95	92	97	48	48	46
30	30	31	32	45	43	46	85	82	87	46	46	42
20	27	28	30	39	39	42	72	72	74	41	41	38
10	24	24	25	33	35	35	54	60	58	35	35	33
Mean	35.3	35.8	37.0	50.9	52.0	53.1	102.2	104.9	106.6	50.0	50.2	48.0
No.	135	249	325	135	249	325	135	249	325	135	249	325

Comparison of Attitude Scores by Conference Participation

Table 31 gives the deciles and means on the seven teacher attitude scores for the 339 who shared in the program of either a conference of less than a week, or a week long or longer workshop for home economics teachers. This group did not show outstandingly high attitude scores, though all scores indicate this group was above average and especially high in mean MTAI score.

Table 31. Deciles and means on seven attitude scores for homemaking teachers who shared on program of conferences, institutes and/or workshops in 1958-59

Centile	SC	P	C	Sm	HTAI	MTAI	F
90	30	62	56	47	71	159	61
80	27	58	52	44	64	136	58
70	25	56	50	40	59	125	56
60	23	54	47	38	55	116	53
50	22	52	45	37	52	104.5	50
40	20	49	43	35	49	96	47
30	18	47	40	32	46	85	46
20	17	44	38	29	41	72	41
10	14	40	34	25	36	60	35
Mean	22.6	52.1	45.9	36.8	53.0	106.8	49.6
No.	339	339	339	339	339	339	339

Summary of Biographical Data

This section summarizes information obtained from the biographical data sheet[12] as it relates to the maintenance of an effective classroom learning situation. The mean scores on the various attitude scales[13] were calculated for those giving each response to each item. In instances where the number responding in any category was exceptionally small, appropriate combinations were made. Frequencies for the five school-size strata were combined; since differences in the means for most scores were not great, only summaries are presented for the most part. When differences among size strata were great enough to be of interest the details are shown. This section deals with the 712 cases for whom complete information was available.

---

[12] The development of the data sheet is discussed on page 26.

[13] The inventories are described in detail in Chapter II.

Responsibilities of the teachers

Non-class school activities of the teachers were classified as follows: (a) those primarily of an educational nature (F. H. A. or club advising, class advising, home visits home experience, counseling, care of the laboratory, and committee and staff meetings), and (b) those sometimes required of teachers but having somewhat limited educational value (school money making projects, responsibility for school functions, study halls, home room period, hall duty, clerical work, and hot lunch program). This was admittedly an arbitrary division based on consensus of the research team.

Figure 1 presents graphically the percentage of teachers in each school-size stratum reporting various amounts of time per month spent on these two broad categories of non-class responsibilities. The average number of hours are approximate medians computed from the frequencies. Teachers used the several indicators (0 to 4) for items 6 to 25 of the teacher data sheet.

Table 32 contains the percentage data shown in Figure 1 and the frequencies for each stratum reporting different amounts of time devoted to those non-class responsibilities arbitrarily classified as primarily educational in nature. If the first three percentages in each column of Table 32 are added, one obtains 24.3, 14.2, 24.2, 24.4, 33.8 as respective percentages of teachers in each stratum who spent approximately one hour per day on this type of non-class responsibility. Thus in school-size II (15-29 teachers) over 85 per cent of the teachers reported heavier emphasis on such responsibilities while in the large systems (Stratum V) only 66 per cent did. These two strata depart markedly from the common percentage noted in the other three.

Table 32. Number and percentage of teachers in each stratum reporting various hours per month spent on non-class responsibilities of educational nature

*Hrs.	Strata									
Per Mo.	I		II		III		IV		V	
	f	%	f	%	f	%	f	%	f	%
6	0	0	1	.5	1	.7	0	0	0	0
12	11	9.2	1	.5	12	7.6	7	6.1	12	9.2
18	18	15.1	25	13.5	25	15.9	21	18.3	32	24.6
24	37	31.1	46	24.2	33	21.0	31	27.0	32	24.6
30	34	28.6	59	31.1	47	29.9	29	25.2	28	21.6
36	14	11.8	42	22.1	26	16.6	19	16.5	20	15.4
42	5	4.2	16	8.4	13	8.3	8	7.0	6	4.6
Total	119	100.0	190	100.0	157	100.0	115	100.0	130	100.0

*Average

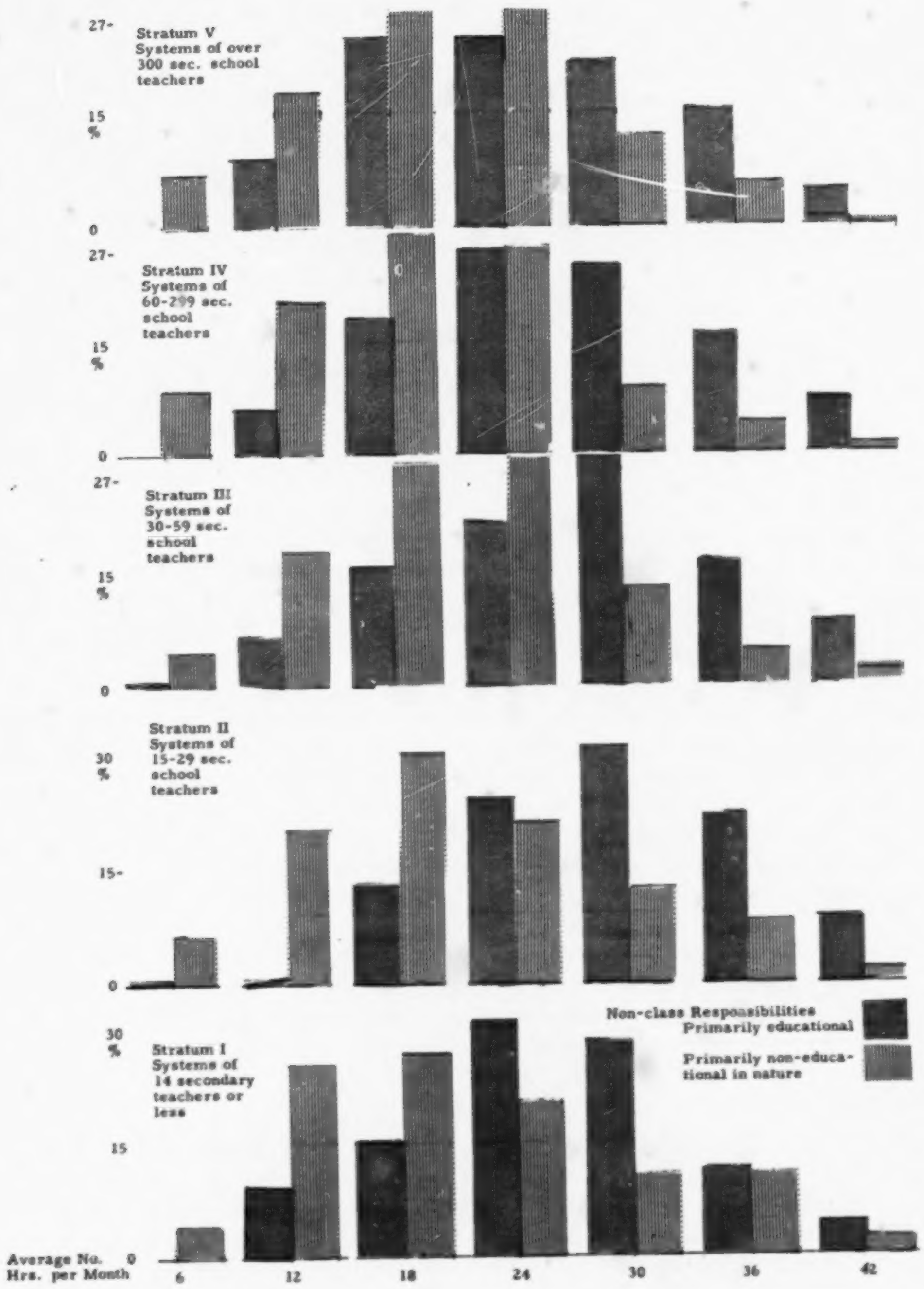

Figure 1. Percentages of teachers in each stratum reporting various average numbers of hours per month on non-class responsibilities.

Table 33. Number and percentage of teachers in each stratum reporting various hours per month spent on non-class responsibilities primarily non-educational

*Hrs. Per Mo.	Strata I		II		III		IV		V	
	f	%	f	%	f	%	f	%	f	%
6	5	4.2	12	6.3	7	4.5	10	8.7	9	6.9
12	30	25.2	39	20.5	28	17.8	23	20.0	23	17.7
18	32	26.9	57	30.0	46	29.3	34	29.6	37	28.5
24	24	20.2	41	21.6	47	29.9	32	27.8	37	28.5
30	13	10.9	23	12.1	20	12.7	10	8.7	16	12.3
36	12	10.1	15	7.9	7	4.5	5	4.3	7	5.4
42	3	2.5	3	1.6	2	1.3	1	.9	1	.7
Total	119	100.0	190	100.0	157	100.0	115	100.0	130	100.0

*Average

Table 33 contains the percentages shown in the vertical striped bars of Figure 1 which indicate the responsibilities of somewhat more limited educational value. If, again, the first three percentages in each column are accumulated, one obtains 56.3, 56.8, 51.6, 58.3, and 53.1 as the respective percentages of teachers in each stratum reporting less than one hour per day devoted to this type of responsibility. The differences among these percentages are not significant but their general level contrasts markedly with the corresponding ones from Table 32 and indicates that smaller percentages of teachers had excessive loads of these non-educative duties.

The actual time spent in these responsibilities was not a major concern in this investigation. Rather, the concern was for the relationship which might exist between the time spent and expressed attitudes. However, no significant differences appeared among the five means of groups based on the amount of time devoted to either of these types of non-class school activities as indicated in Tables 34 and 35.

Table 34. Mean attitude scores of homemaking teachers classified according to time spent on non-class activities of primarily educational nature

Average Hrs. Per Month	N	Mean Scores on SM	MTAI	HTAI	F	SC	P	C
9	44	37.0	103.8	51.5	50.4	23.1	54.3	48.0
18	120	35.1	103.2	52.7	48.6	21.9	54.7	48.7
24	179	36.7	106.4	52.8	49.3	22.1	52.8	47.3
30	197	36.4	105.0	50.9	49.8	22.3	51.4	45.1
39	163	36.6	105.0	53.0	48.9	23.7	53.1	46.5

Table 35. Mean attitude scores of homemaking teachers classified according to time spent per month on non-class activities having limited educational value

Average Hrs. Per Month	N	Mean Scores on SM	MTAI	HTAI	F	SC	P	C
9	186	35.7	105.7	52.1	49.6	22.3	52.8	47.8
18	205	35.8	104.5	51.8	48.8	22.8	53.3	46.7
24	181	36.8	105.5	52.2	49.6	21.7	51.9	45.9
30	82	36.8	107.0	54.5	48.9	24.1	54.0	47.3
39	57	37.3	102.0	51.8	48.3	22.6	54.6	47.6

The number who reported that they had served or were currently serving as supervising teachers was somewhat surprising: 281 or approximately 35 per cent. About as many had guided this phase of the professional program without having had preparation for doing so as had had special training for the work. Supervising teachers had higher mean scores than non-supervisors on subject matter, family, and both the Home Economics and Minnesota Teacher Attitude inventories. (See Table 36 for means and Table D-8 in Appendix D for significance tests.) Mean scores of the two groups on the P, F, Sm, HTAI and MTAI were significantly different. When the mean scores of those who had some preparation for the job were compared with those who had not, no great differences were evident. In each of the last four inventories named, however, those with preparation were higher.

Table 36. Mean attitude scores classified by service as supervisor of student teachers

Supervised Student Teachers	N	Mean Scores on SM	MTAI	HTAI	F	SC	P	C
Yes	281	37.8	113.4	54.8	50.9	22.4	51.9	46.1
No	430	35.3	99.7	50.9	48.0	22.6	53.5	47.0

Since the sample was limited to vocational homemaking teachers, it is not surprising that over 75 per cent taught no classes other than home economics to girls. That so few taught the subject to both boys and girls may be a matter of concern to state supervisors. However, those who taught both boys and girls in homemaking were found in each school-size stratum and, as shown in Table 37, had materially higher mean scores on the people-centered inventories (F, HTAI, MTAI). By way of contrast, 107 teachers who taught some course in addition to homemaking had lower mean scores on the inventories listed and markedly higher mean scores on those dealing with the profession, the community, and the school community. Differences in means on C, MTAI, HTAI, and F were significant at the one per cent level. (See Table D-9.)

Table 37. Mean attitude scores classified according to composition of classes and subject taught

Teach	N	SM	MTAI	HTAI	F	SC	P	C
		Mean Scores on						
HE & other to boys & girls	78	34.6	95.2	49.3	46.9	22.6	54.8	48.6
HE & other to girls	29	33.7	87.6	47.1	45.0	23.3	54.7	50.4
HE to boys & girls	70	37.5	117.6	56.8	52.6	21.6	50.6	42.9
HE only to girls	534	36.4	106.0	52.5	49.2	22.4	52.7	46.8

The majority of teachers responding had no contact with an adult homemaking program. Of the 297 who did, the majority had responsibility for only one class series. Those who taught adults were not significantly different from others in any of the attitudes measured. See Table 38 for the sample means.

Table 38. Mean attitude scores classified by adult education responsibilities

Nature of Responsibility	N	SM	MTAI	HTAI	F	SC	P	C
		Mean Scores on						
None	400	36.0	107.0	53.5	49.2	22.5	53.3	46.7
One class series	135	36.8	102.7	50.3	49.6	22.6	52.5	47.6
More than one series	83	35.1	105.1	52.3	50.6	22.6	51.4	46.5
Comb. & non-class unit	79	36.7	99.0	50.7	48.6	22.4	51.8	45.9
No answer	15	40.1	103.3	44.3	47.3	21.1	55.1	44.9

Summary: Teaching Responsibilities

To summarize, over 75 per cent of the teachers taught only girls and only homemaking during 1958-59. They used approximately 43 hours per month on extra class responsibilities. There were fewer differences evident in the amount of time used in such activities by teachers in schools of different size strata than might be expected, especially in view of the prevailing belief that the smaller the school, the greater the demands on teacher time. That 40 per cent of the group served as supervising teachers appears high, although this figure includes those who were inactive as supervisors in 1958-59 but who had served at some time in such a capacity. That half of the supervising teachers served without benefit of preparation (either inservice or as a course) should be of concern to teacher educators as well as to state supervisors.

Homemaking teachers are often said to have difficulty teaching boys and to resist assignment to classes in which boys are present. Although only 70 taught homemaking to both boys and girls, these teachers scored distinctly higher on the inventories dealing with attitude toward people than the remainder of the group.

Statistically significant differences in mean scores on the attitude scales with reference to any of the responsibilities carried were found in only one other instance--that of the supervising teachers. This group excelled in scores on those attitude inventories which purport to measure acceptance of others and in Sm but on other attitude measures their mean scores were not higher. In fact, the mean on inventory P (profession) was significantly lower for those who supervised student teachers.

The Teaching Situation

Table 39 shows the population of the school district in which respondents taught. There was little difference in the mean scores of teachers from the various groups on attitudes toward the profession or the school community. There is a consistent increase, however, in Sm, MTAI, and F means with an increase in size of the school district. The reverse is shown in mean scores on attitude toward the community. Analysis of variance tests indicated that differences among means on MTAI, HTAI, and F were significant at the one per cent level of confidence while those regarding community and subject matter were of doubtful significance with a probability level between the one and five per cent. The differences among means on the other two attitudes, P and SC, were not great enough to be considered significant. (See Table D-10 for these significance tests.)

Table 39. Mean attitude scores of homemaking teachers classified by population of their school district

Population of School District		Mean Scores on						
	N	SM	MTAI	HTAI	F	SC	P	C
To 2499	143	34.6	95.3	48.7	47.0	23.5	52.7	47.7
2500-11,999	246	36.4	105.0	53.1	49.1	22.5	53.3	47.5
12,000-99,999	174	37.1	106.3	52.3	49.8	22.4	52.2	46.1
100,000 up	78	37.8	119.5	56.1	52.8	21.7	52.6	44.0
Unknown	71	35.6	107.2	53.0	47.9	21.0	53.0	46.7

Although some of the teachers had fewer than 25 pupils enrolled in all secondary school homemaking classes, far the greater number had 75 or more. As expected, the total class enrollment increased as school size increased. There were few differences in mean scores earned on various inventories by teachers having differing pupil loads. Mean scores on attitude toward subject matter show a slight but regular increase with the rise in total class load. Those with 125 or more pupils had somewhat higher scores on the MTAI and HTAI than the remainder. In no case is there a significant difference in mean attitude score related to class load (Table 40).

Table 40. Mean attitude scores of homemaking teachers classified according to enrollment in day-school classes

Total Class Enrollment	N	Mean Scores on SM	MTAI	HTAI	F	SC	P	C
Less than 50	70	33.0	104.9	52.9	47.8	21.0	53.6	46.9
50-74	142	35.3	97.7	48.9	48.6	23.0	49.5	47.9
75-99	196	36.6	106.9	52.9	50.1	21.8	52.5	46.0
100-124	190	37.2	101.3	51.8	48.8	23.1	53.2	47.1
125 or more	113	37.4	112.6	56.2	50.0	22.2	52.9	46.3

Since this investigation involved vocational homemaking departments, it was expected that most of the respondents taught in senior or combined junior-senior high schools. Reference to the complete presentation (Appendix C) makes clear that separation into junior and senior high school comes with school size III, when enrollment warrants differentiation of teacher responsibilities or when the junior and senior high school are physically separated. In sizes IV and V fewer people had a combination assignment. Senior high school teachers had slightly higher mean scores than others on MTAI, HTAI, and F; junior high school people had slightly higher subject matter scores, and teachers in the combined programs excelled in attitude toward community. None of the differences in means shown in Table 41 is pronounced.

Table 41. Mean attitude scores of homemaking teachers classified according to the grade level of their classes

Level Taught	N	Mean Scores on SM	MTAI	HTAI	F	SC	P	C
Jr. High	108	36.9	103.0	51.7	49.3	22.5	53.3	46.2
Sr. High	289	36.6	109.4	53.3	50.5	22.1	52.2	45.7
Both	314	35.7	102.0	51.6	47.9	22.9	53.3	48.1

Table 42 shows the mean attitude scores for the teachers classified according to the teaching level they preferred. None of the differences among means in this table is large enough to be significant. Only 51 or seven per cent of the 712 teachers indicated their teaching preferences for other than secondary school pupils. A two-way frequency tabulation of teaching level versus level preferred showed that 383 or 54 per cent were teaching at exactly the level preferred. There were 156 or 22 per cent who taught some pupils in both junior and senior high school levels but indicated a preference for one or the other and there were 90 others or 13 per cent who were teaching at only one level and preferred a combination of levels. Table 43 shows the frequencies classified by actual teaching level and preference.

Table 42. Mean attitude scores of homemaking teachers classified according to teaching level preferred

		Mean Scores on						
Level	N	SM	MTAI	HTAI	F	SC	P	C
Preschool Elementary	11	38.6	84.5	46.3	35.8	23.2	53.7	52.9
Jr. High	137	34.9	101.2	49.3	47.7	22.4	54.1	47.6
Sr. High	297	36.8	108.4	53.8	49.9	22.3	52.9	46.6
Jr.-Sr. Hi	226	36.3	106.3	53.3	48.8	22.7	51.6	46.0
Adults	40	36.3	94.5	47.7	50.0	23.0	55.7	48.9

Table 43. Frequency distribution of 712 homemaking teachers classified by teaching level and preference of teaching level

Preferred	Actual Teaching Level				
Level	Not Given	Jr. High	Sr. High	Combined	Total
Preschool, Elementary	0	4	3	4	11
Junior High	0	55	12	70	137
Senior High	0	17	194	86	297
Combined Jr.-Sr. Hi	2	27	63	134	226
Adults	0	4	18	18	40
None stated	0	1	0	0	1
Total	2	108	290	312	712

The teachers seemed to be fairly well satisfied with the facilities in the homemaking departments in which they worked. Table 44 shows that 42 per cent considered them adequate for all phases of homemaking instruction while 35 per cent saw them as satisfactory for some phases of work. That almost one-fourth were viewed as inadequate warrants attention.

These data, however, reflected the point of view of the teacher reporting. What one person with a somewhat narrow idea of the scope of homemaking considers adequate might be called most inadequate by a more sophisticated teacher. Further, the 'growing' teacher, the one who constantly seeks ways to make the department the best possible situation for learning, would seldom see facilities as completely adequate. It is likely that the figure (23 per cent) includes not only those departments which were grossly deficient but also some which were basically good but in which refinements might be needed. Although there are some differences among the mean scores of the four groups based on their expressed degree of satisfaction with departmental equipment, only those on MTAI and HTAI seem large, and those are not satistically significant (Table 44).

Table 44. Mean attitude scores of homemaking teachers classified according to adequacy of departmental space and facilities

Space and Facilities	N	Mean Scores on						
		SM	MTAI	HTAI	F	SC	P	C
Adequate: All Phases	298	36.3	109.7	54.1	49.8	22.2	52.2	45.9
Adequate: Some Phases	251	36.7	100.1	50.3	48.7	22.6	53.5	47.5
Inadequate: Plans	128	36.1	106.3	52.6	49.0	22.7	53.0	46.4
Inadequate: No Plans	34	33.7	98.5	51.1	48.1	24.0	53.9	50.8

Table 45. Mean attitude scores of homemaking teachers classified according to the teachers' perception of pupil relationships

Relationship	N	Mean Scores on						
		SM	MTAI	HTAI	F	SC	P	C
Excellent	203	36.7	113.0	54.4	49.3	22.5	53.3	46.1
Good	420	36.1	103.8	52.0	49.5	22.1	52.0	46.2
Fair	74	36.5	95.1	50.2	48.0	23.7	55.6	50.7
Poor	14	30.9	85.2	43.9	40.8	22.9	55.4	52.1

For the most part, teachers saw the relationships among pupils in the schools represented in this study as either good or excellent. Few reported poor relationships; but of the 14 reporting thus eight were from school size I, and none were in school size V. Table 45 shows that those who assessed the relationships as poor had mean scores decidedly lower than others on Sm, MTAI, HTAI and F. Conversely, those who reported pupil relationships are excellent had decidedly higher mean scores on both MTAI and HTAI (Table 45). Analysis of variance tests indicated the MTAI, HTAI, P and C means are significantly different but the mean differences for inventory F are of doubtful significance, while those for inventory Sm and SC are not significant. See Table D-11 for these tests of significance.

The data on presence or absence of restrictions on faculty behavior contrast pleasantly with popular belief (Table 46). An overwhelming majority reported that their private lives were free from undue interference from the school administrator, that there were either no restrictions whatever, or that only suggested (not mandatory) codes of action prevailed.

Table 46. Mean attitudes scores of homemaking teachers classified according to teachers' perception of school policy regarding teachers' private life

		Mean Scores on						
Policy	N	SM	MTAI	HTAI	F	SC	P	C
No Restrictions	220	36.2	106.1	52.2	50.1	22.5	52.6	46.2
Suggested Codes	474	36.2	104.2	52.2	48.6	23.0	53.0	47.0
Definite Restrictions	17	35.8	115.9	56.1	50.6	19.6	51.8	47.7

Summary: the teaching situation

These data suggested that those reporting saw their teaching situations in a favorable light. The space and facilities for teaching were adequate or relatively so, or plans were being made for their improvement. The relationship among students was either good or excellent. The personal lives of the teachers were not unduly restricted.

The scores on the inventories suggested some interesting questions. The data on attitude toward community, for example, showed that teachers from 'large' systems were consistently lower on mean score than are others. In this instance, the large school was considered to be one with over 100,000 district population, a total enrollment of 125 or more in the homemaking classes of the teacher reporting, and a teacher assigned to senior high school only. One might speculate on possible reasons for this showing. It is conceivable that in large schools the teacher may work in a part of the city far distant from where she lives so that she has little actual contact with a community as such. Schools are sometimes found in an area composed primarily of commuters with a resultant lack of community cohesiveness. In still other places the school makes no pretense of serving as a rallying point for community activities: the city itself may provide what, in smaller towns, is within the purview of the school. When the 'small' school was identified as one having fewer than 2500 adults and children in its school district, one teacher for both junior and senior high school homemaking classes, and a combined class enrollment of fewer than 50 pupils, it was apparent that teachers from these schools scored highest on attitude toward community. Here the school is likely to be the focal point of community life, and the teachers are leaders.

The MTAI, HTAI and F inventories all center around attitudes toward people. Using the same crude criteria to classify schools, one notes that the highest mean scores on these scales were made by teachers from the larger schools, the lowest by those in small schools. The differences were small, however.

The same general trend was evident in the scores on attitude toward subject matter. In terms of size of school district and total homemaking class enrollment, teachers in the large schools were at the top in mean scores. Again, teachers in the small schools had lower mean scores with the differences small.

These summary statements must be interpreted with utmost caution. A mean reflects a wide range, and very high and very low scores were found in each category. The criteria for separating large and small in this discussion are crude. What is interesting is that an analysis of the data from this section of the biographical data sheet places the teacher from the large school in a favorable light, contrary to expectations of some people.

Biographical Information

Frequency data concerning length of tenure were contradictory to a generally held belief about the short professional life of the homemaking instructor. In fact, a most encouraging picture emerged. Roughly, a ten-year period of service appeared to be the average in these samples which contained somewhat higher proportions of the population in the larger school districts. When this disproportionate sampling was taken into account, eight and a half years was the estimated median length of experience in the population. Although there was considerable variation in attitude scores made by people with different amounts of experience, none was marked (Table 47).

More than two-thirds of the homemaking teachers in this study (72 per cent) were married, widowed or divorced. Of this 72 per cent, the largest group (50 per cent) was composed of married women with children. When the disproportionate

Table 47. Mean attitude scores of homemaking teachers classified according to length of teaching experience

Experience: Years	N	Mean Scores on SM	MTAI	HTAI	F	SC	P	C
Less than 1	50	35.2	104.6	51.6	46.9	21.7	53.4	48.1
1 to 2.9	85	35.3	100.8	50.5	51.7	21.6	52.6	47.8
3 to 4.9	94	36.0	97.4	49.5	51.2	22.2	52.1	46.1
5 to 9.9	155	35.9	109.4	53.5	49.9	22.3	53.4	46.2
10 to 19.9	203	36.4	103.4	52.2	48.3	23.1	53.6	47.1
20 or more	122	38.0	103.7	54.5	47.5	23.1	51.5	46.4
Not given	2							

sampling fractions of the strata were taken into account, the population estimates of the two corresponding percentages were 74 and 52 respectively. Single teachers earned lower mean scores on all inventories except that of attitude toward community (Table 48).

Table 48. Mean attitude scores of homemaking teachers classified by marital status

Marital Status	N	Mean Scores on SM	MTAI	HTAI	F	SC	P	C
Single	199	34.9	101.8	50.6	47.1	21.9	52.5	47.3
Married: No children	184	36.1	105.8	52.5	50.1	22.7	52.2	46.5
Married: Children	259	37.0	103.9	52.2	49.3	22.8	53.4	46.7
Widowed, div. No children	17	36.9	102.5	54.5	48.2	23.9	59.2	48.1
Widowed, divorced, Children	52	38.6	123.1	58.2	52.7	22.4	52.3	46.0

Figure 2 shows the percentage marital status distribution of teachers in each system-size category. The larger communities (Strata IV and V) employed slightly higher percentage of single teachers than the smaller systems (Strata I, II, and III) but about the same proportion of widowed or divorced. Hence the proportion married in each stratum was approximately the difference between 90 per cent and the percentage single. The similarity of the corresponding proportions in the five different sizes of school systems is the most striking characteristic of Figure 2. The fourth bar in each section of Figure 2 shows that approximately 60 per cent of the married teachers had children. Table 49 contains the percentages shown in Figure 2 and the frequencies upon which they were based.

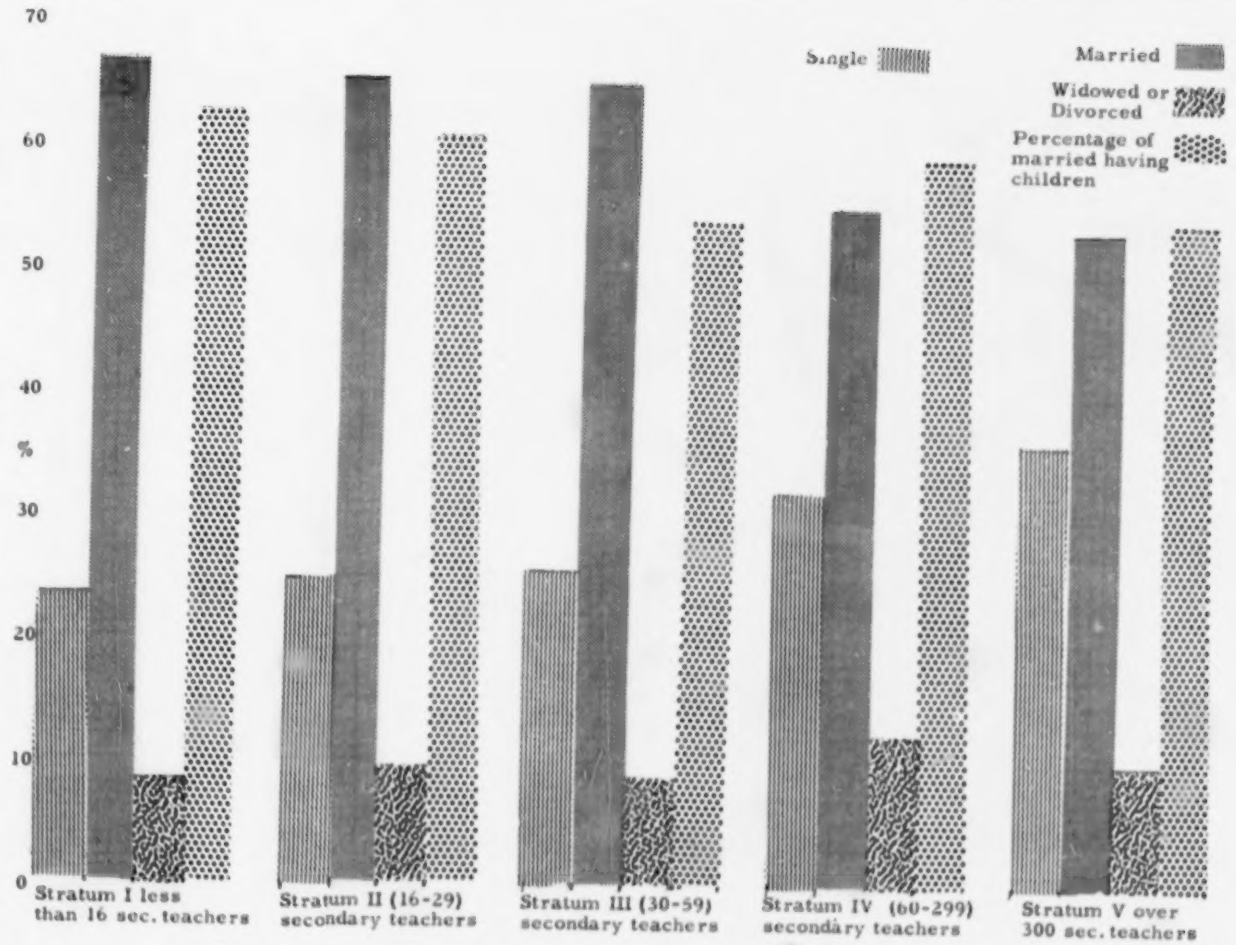

Figure 2. Percentage distribution on marital status of homemaking teachers for five population strata based on size of school system.

Table 49. Percentage and frequency distribution of marital status of five homemaking teacher samples of population strata based on number of secondary teachers in school system

Marital Status	Strata I N	I %	II N	II %	III N	III %	IV N	IV %	V N	V %	Total N	Total %
Single	28	23.5	47	24.7	40	25.5	37	32.2	47	36.2	199	28.0
Married	81	67.1	125	65.8	103	65.6	64	55.6	70	53.8	443	62.3
Married With Children	51	63.0*	76	60.8	56	54.4*	38	59.4*	38	54.3*	259	58.5*
Widowed or Divorced	10	8.4	18	9.5	14	8.9	14	12.2	13	10.0	69	9.7

* Percentages in third line are based upon the number married given in line two. All other percentages are based on the number of teachers in the respective stratum sample.

Teachers entered the profession for a variety of reasons. Table 50 shows that the majority, 468, did so because they liked people, liked the idea of teaching, or for cultural or idealistic reasons. A rather high number, 243, became teachers at the suggestion of counselors, advisors and/or relatives. One may question however, whether it is always possible to recognize the predominant reason for choice-making. Further, if the choice was made some time ago, memory may not serve with precise accuracy. Those who said that liking for children, for teaching, or idealistic reasons were the motivating factor for entering the profession had mean scores somewhat higher than others on MTAI and HTAI. Those who chose the profession for reasons of convenience had higher mean scores on attitude toward community, and school community and profession. Table D-12 in Appendix D shows the significance tests for the differences observed in Table 50. The difference for MTAI and SC are significant but those for C and P are of doubtful significance. Those for the other two inventories are not significant.

Table 50. Mean attitude scores of homemaking teachers classified by predominant reason for entering the profession

Reason for Entering Profession	N	Mean Scores on SM	MTAI	HTAI	F	SC	P	C
Like Children	139	36.5	110.3	53.6	49.4	21.2	51.5	45.5
Like to Teach	233	36.5	103.6	51.4	49.5	22.3	53.0	46.7
Convenience	73	35.2	95.8	51.7	46.3	24.2	55.4	49.8
Influence of Others	170	35.3	102.2	51.4	48.9	23.0	52.9	46.8
Idealistic	97	37.5	113.9	54.9	50.	22.0	52.3	46.3

Table 51. Mean attitude scores of homemaking teachers classified by time of decision to enter the teaching profession

Time	N	Mean Scores on SM	MTAI	HTAI	F	SC	P	C
Pre-College	448	35.3	102.0	50.8	47.8	22.4	52.5	46.5
1 - 2 College Year	129	36.3	105.4	53.3	49.8	21.3	51.9	46.4
3 - 4 College Year	84	37.3	108.0	53..1	50.2	21.5	51.5	45.0
After College	51	38.3	111.9	54.2	50.1	23.9	54.1	47.6

Table 51 shows that the majority of those who entered teaching realized that they wanted to teach by the time they were in high school. Although there were a number of differences in mean scores on attitudes among the groups determined on the basis of the time the decision was made, none were significant and only one was relatively consistent: that is, the steady increase in Sm score with the recency of interest in teaching. Table D-13 shows significance tests.

Table 52 shows that the honor graduates were distributed throughout the five school sizes. The mean scores of the honor graduates were higher than the scores of the rest of the teachers on every inventory save that of attitude toward community. None of the differences in means was significant except Sm and F, subject matter preference and familiar personal relations (one and five per cent level respectively). Table 52 gives means and Table D-14 shows the significance tests.

Table 52. Mean attitude scores of homemaking teachers classified by graduation honors earned

		Means Scores on						
Status	N	SM	MTAI	HTAI	F	SC	P	C
Without Honors	529	35.6	104.0	51.7	48.6	22.3	52.7	47.0
With Honors	183	38.0	108.5	54.0	50.7	22.6	53.1	46.0

Table 53. Mean attitude scores of homemaking teachers classified according to the amount of graduate work

		Mean Scores on						
College Credit Beyond First Degree	N	SM	MTAI	HTAI	F	SC	P	C
None	172	35.3	100.2	51.0	48.9	21.9	53.3	47.5
Less than Half for MA	272	35.6	100.5	50.4	48.6	22.6	52.5	47.1
Less than MA, more Than Half	90	37.5	110.2	53.9	49.7	22.2	52.7	45.7
MA or Equivalent	66	36.5	116.9	57.4	50.3	22.1	52.0	44.3
Beyond MA	111	38.2	113.2	54.8	49.5	23.0	53.2	46.8

Table 53 shows the amount of graduate work completed by the homemaking teachers in the study. Considering that there were 50 people in the sample who had taught less than one year and were probably recent graduates, these figures indicate an unusual interest in the continuance of formal education. Those carrying on course work came from all five school-size strata; however, the greater number with advanced degrees or an equivalent amount of course work were concentrated in the two largest school sizes. Although there were marked differences in the mean scores made on the attitude inventories by those having differing amounts of formal education, such differences were not large enough to be significant except for MTAI and HTAI (one per cent level). The significance of the mean differences in Sm preference were doubtful (five per cent level). Table D-15 shows the significance tests for the means reported in Table 53.

Figure 3 shows the cumulative percentage of teachers in the five strata who had earned varying amounts of graduate credit. The first point plotted on each line shows the percentage who had more than a Master of Arts degree. The three strata representing school systems of less than 60 secondary school teachers had approximately ten per cent of the teachers so qualified but the larger systems had over 20 per cent at this educational level. The second plotted point shows the percentage in each stratum who had at least a Master of Arts degree. Here, again, the first three strata were together with 17 - 20 per cent while the larger systems had 30 and 40 per cent of their teachers so qualified.

The recency of study is sometimes as important as the amount of graduate work taken. Over one-third of the group responding had engaged in formal study within the year, and 70 per cent had done so within a three-year period. Table 54 shows the means and Table D-16 the significance tests. The mean on attitude toward profession (P) and familiar interpersonal relations (F) were significantly different among groups based on recency of academic work.

Table 54. Mean attitude scores of homemaking teachers classified according to time since last academic credit was earned

Years Since		Mean Scores on						
Last Study	N	SM	MTAI	HTAI	F	SC	P	C
Less than One	313	36.3	107.6	53.2	49.8	22.2	52.4	46.8
1 to -3	190	37.0	107.3	52.1	50.1	22.0	51.8	45.8
3 to -5	100	35.2	102.3	50.1	48.7	22.3	52.8	47.4
5 to -10	56	34.3	96.3	49.7	45.9	23.3	55.8	47.5
10 to -20	37	37.5	96.5	52.8	43.4	23.5	55.2	46.8
20 or more	15	35.2	102.5	55.1	51.5	25.6	57.9	49.9

One of the major avenues for inservice education in many states is the annual conference for homemaking teachers. Such meetings are held for varying lengths of time and at differing times of the year. In some states, more than one conference is held annually. Whatever the arrangement, all vocational

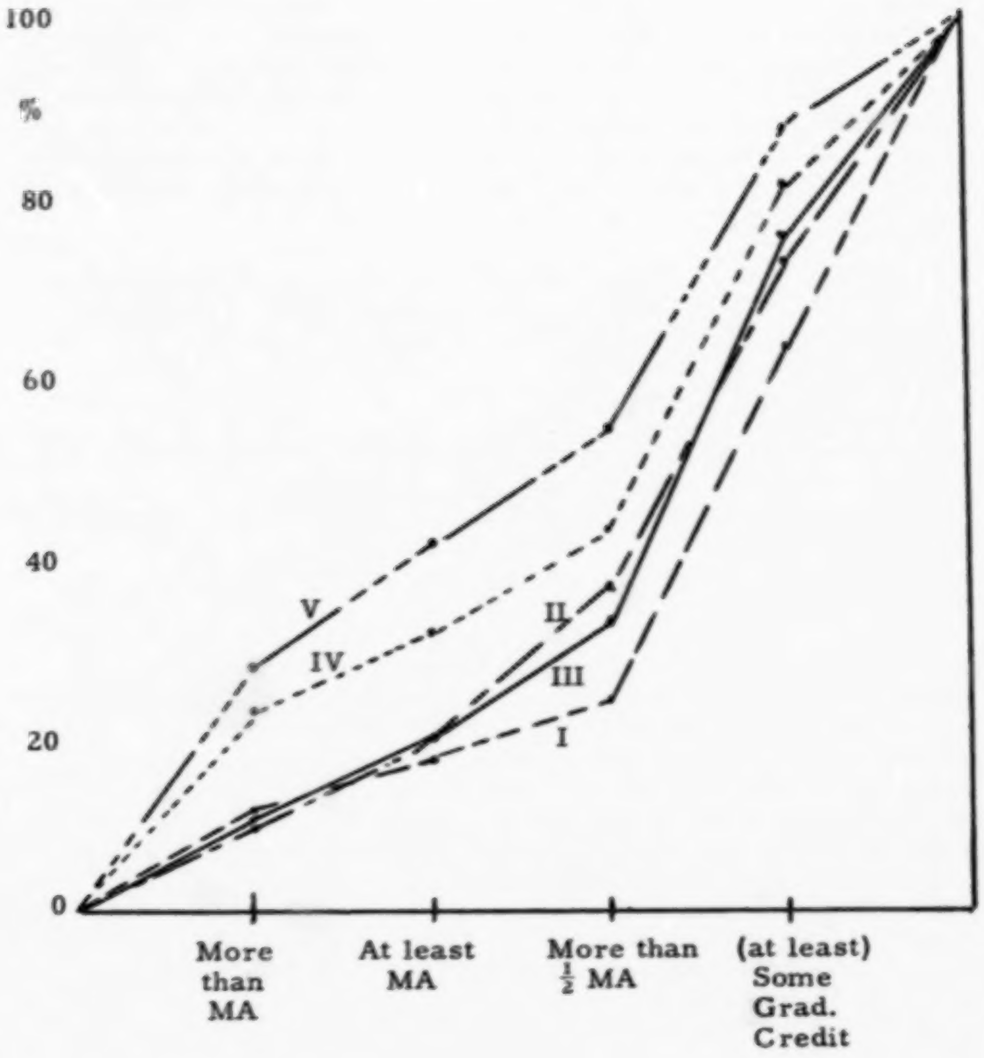

Figure 3

Figure 3. Graduate work of homemaking teachers in five school-size strata shown in cumulative percentages.

teachers are encouraged to attend and non-vocational teachers are often invited. Under ordinary circumstances, of those on full-time appointments in vocational departments, only those employed after the conference had been held could be said to have had no opportunity to attend. Beginning teachers, especially those from another state, might sometimes be unaware of conferences; however, of those who did not attend, only nine were first-year people. Those who attended and/or took active part in conferences had higher mean scores on the Sm, MTAI, and HTAI scales, whereas nonparticipants scored higher on the C, SC, and P scales. Table 55 shows the means and Table D-17 contains the significance tests. The differences in means of P and C attitudes were significant.

Table 55. Mean attitude scores of homemaking teachers classified according to attendance at conference of one or more days

		Mean Scores on						
Status	N	SM	MTAI	HTAI	F	SC	P	C
Did not Attend	121	35.1	98.9	50.7	47.7	23.3	55.8	48.9
Attended Only	291	36.0	106.4	52.3	49.3	21.8	52.0	46.6
Participated	300	36.9	106.5	53.0	49.5	22.6	52.4	46.0

Since few states provide a workshop session of a full week or more, the larger number not attending, shown in Table 56, was expected. There was one significant difference in mean scores on the attitude scales of those who attended the conferences and those who did not do so. This was on attitude toward community, though subject matter preference was of doubtful significance. Those who contributed to the program had somewhat higher mean ratings on the F, MTAI, and HTAI inventories than others, but they were noticeably lower in the mean score on attitude toward community. Table 56 shows the means and D-18 the significance tests.

Table 56. Mean attitude scores of homemaking teachers classified according to attendance at a workshop of a week or more

		Mean Scores on						
Status	N	SM	MTAI	HTAI	F	SC	P	C
Attended Only	70	36.0	102.4	50.8	48.8	22.1	54.5	47.5
Participated	152	37.1	107.6	52.7	50.0	21.7	51.4	44.9
No Opp.	402	36.5	105.4	52.6	49.0	22.8	53.0	47.5
Did not att. But had Opportunity	88	33.9	102.3	51.8	48.4	22.0	53.4	45.7

Teacher educators and supervisors, while welcoming the finding that 460 of the teachers were well pleased with teaching as a career, may be concerned at the large number, 214, of unsure practitioners as shown in Table 57. Those who considered teaching 'the best profession by far' had decidedly higher mean scores on MTAI, HTAI, and F than those who disliked the work. However, the latter had markedly higher scores on community, school community, and profession. Tests shown in Table D-19 show that the mean differences were significant for MTAI, P, C and SC but doubtful for HTAI and F.

Table 57. Mean attitude scores of homemaking teachers classified according to their feeling about the profession

Feeling about Teaching as a Career	N	Mean Scores on SM	MTAI	HTAI	F	SC	P	C
Far the Best	194	37.5	111.2	54.1	50.0	23.1	52.4	46.5
Best Probably	267	35.5	105.5	52.0	50.0	21.3	51.1	44.7
The Best	214	35.9	102.1	52.0	47.5	22.9	54.7	48.4
Others better, dislike	37	36.7	89.2	47.5	47.4	23.4	57.0	55.5

Table 58 shows that those who rated their current job excellent had considerably higher mean scores on MTAI, HTAI, and F than did those who disliked the specific job or who were unsure about the matter. As was true in reference to the profession, those who disliked the position or found it only moderately satisfying had the higher mean scores on attitudes toward community, school-community, and the profession. The tests of significance are contained in Table D-20. The differences in means were significant on attitudes P and C and at doubtful level on HTAI.

Table 58. Mean attitude scores of homemaking teachers classified according to their attitude toward present position

Liking for Present Job	N	Mean Scores on SM	MTAI	HTAI	F	SC	P	C
Excellent	277	36.9	108.2	53.8	50.1	22.2	52.1	45.7
Very Well	295	36.0	105.1	52.1	49.1	22.3	52.4	46.4
Well	110	35.8	100.9	50.4	47.2	23.0	54.6	49.4
Not too well or Dislike	30	33.3	93.4	47.6	47.5	22.8	56.5	49.8

The great majority of the respondents planned to return to their current positions. Few intended to leave the field for reasons of dislike for the work. Those who did plan to leave were not significantly different insofar as attitudes were concerned from those who remained. (See Table 59 for means and Table D-21 for significance tests).

Table 59. Mean attitude scores of homemaking teachers classified by employment plans for the next year

		Mean Scores on						
Plan	N	SM	MTAI	HTAI	F	SC	P	C
Continue in same pos.	518	36.5	106.3	53.0	49.2	22.5	52.5	46.9
Continue in new pos.	53	33.5	95.5	47.5	47.2	22.2	53.9	47.5
Teach: try to advance	66	37.3	105.7	52.8	48.4	22.3	54.2	45.4
Leave field: misc. reasons	10	36.0	105.2	49.5	48.4	22.3	52.0	48.1
Leave field: reason not related to teaching	40	36.3	103.6	50.4	51.6	23.0	53.0	45.8
No plans: probably teach one year	25	33.7	104.7	51.5	49.7	20.3	53.8	46.3

Supervision: Local and State

The amount of supervision of instruction given a school system undoubtedly varies considerably with the role assumed by members of staff. In small schools, the primary responsibility of the principal may be teaching with only a small fraction of his time used for administrative and supervisory duties. In very large schools, a specialized curriculum consultant or coordinator may have the supervisory responsibility. Because of such possible differences, the data on supervision must be interpreted with care. Table 60 contains the data classified according to teachers' reported relation with their principals. Few felt that the principal dictated, though 104 reported being left alone. By far the majority of the teachers saw their principals as giving constructive supervision through assistance with problems (195) or through giving help when requested (403). A decidedly lower mean score on MTAI and HTAI was made by those reporting that they were told what to do, although the small number involved did not permit one to place credence in such differences.

Table 60. Mean attitude scores of homemaking teachers classified according to their relations with their principal

		Mean Scores on						
Principal	N	SM	MTAI	HTAI	F	SC	P	C
Tells me What to Do	9	38.7	86.3	47.2	51.7	22.9	49.6	48.6
Helps Work Out Problems	195	36.4	109.3	53.4	50.9	21.7	51.1	44.6
Leaves Alone	104	36.3	103.4	51.8	48.3	24.3	54.7	48.7
Gives suggestions When I ask	403	36.2	104.1	52.1	48.5	22.4	53.4	47.3

All states have a state supervisor of home economics education. Most states have assistant supervisors who are given various titles depending upon the organization within the respective departments of education and the relationship with teacher-education institutions. Some assitance is given to all homemaking teachers directly or indirectly. It is impossible for a vocational homemaking teacher to respond correctly with the statement that she does not work under a state supervisor. That even 50 teachers scattered among all school sizes make such a statement reflects a need for increased interpretation on the part of teacher-educators and supervisory staffs. (Tables 61 and 62).

Table 61. Mean attitude scores of homemaking teachers classified according to the relations with their state supervisor

		Mean Scores on						
The Supervisor	N	SM	MTAI	HTAI	F	SC	P	C
Little help tells what to do	71	35.6	101.8	52.8	49.2	23.1	57.9	48.0
Constructive help	374	36.2	105.8	52.4	49.2	22.1	51.3	46.2
Encourages me to carry responsibility	67	36.9	113.3	55.1	51.5	22.3	52.6	46.1
Helps only by mail or conference	150	36.7	101.5	51.0	48.3	23.6	54.1	47.6
Have no Supervisor	50	35.9	105.0	51.6	49.7	22.0	54.4	46.7

Since more people, as shown in Table 62, responded to the question of relationship to a local supervisor than actually have a special supervisor of homemaking classes, it is likely that a number of teachers reported here their relation to a departmental co-worker, perhaps a senior member of staff, or to a general high school supervisor. Apparently many teachers saw value in this local supervision because 289 reported that constructive supervision was given. Still others recognized that they were stimulated by the encouragement given by this person. A comparison of the few who felt that the local supervisor told them what to do with the many who felt that she helped them solve problems revealed that the latter had higher mean scores on Sm, MTAI, HTAI, and F. Table D-21 containing the significance tests show that for P alone, the mean differences are significant though the attitude toward community differences are doubtfully significant.

Table 62. Mean attitude scores of homemaking teachers classified according to their relations with their local supervisor

Local Supervisor		Mean Scores on						
	N	SM	MTAI	HTAI	F	SC	P	C
Tells what to do	24	33.0	93.0	49.4	44.8	22.9	55.7	48.5
Helps solve problems	209	37.1	111.6	52.7	49.6	22.4	52.6	46.3
Makes aware of problems	80	36.6	102.8	51.0	47.8	22.0	51.7	45.1
Encourages me	32	36.6	115.9	56.2	49.6	22.5	52.8	45.4
Little help or by mail	75	35.0	100.6	52.0	48.1	24.3	57.3	49.5
Have no supervisor	291	36.2	104.4	52.3	49.9	22.3	52.1	47.0

Summary: supervision

All homemaking teachers have supervision from at least one source: the State Department of Education represented by the Supervisor of Home Economics. Depending upon the school organization, supervisory assistance may be given by a specialized person or by the principal. Some teachers in every school-size stratum were unaware of the service from the State Supervisor, which might indicate that some teachers did not understand the services rendered by the State Department. Lack of direct contact may obscure the kind of help provided. The proportion of the group which saw the assistance given by the supervisors as constructive far exceeded that which questioned the worth of the assistance or did not recognize it. Supervision was seemingly welcomed by most teachers.

CHAPTER IV

CLASSROOM OBSERVATION PHASE

This phase of the project was concerned with studying the relations between the classroom learning situation and the teacher attitude inventories developed during the first year of the project. The data for this purpose were collected from a sample of Minnesota homemaking teachers in vocationally approved departments. The teachers provided responses to the revised attitude inventories Form CP and Form SS, to the Minnesota Teachers Attitude Inventory and to the teacher biographical data sheet. Each teacher in this sample was visited for at least one half-day teaching session and rated on the 32 Criteria of Classroom Effectiveness. In addition, the ninth grade class which met earliest in the day responded to the "What Would You Do" pupil adjustment inventory.

There were 249 vocationally approved homemaking departments in Minnesota for the 1958-59 school year. These departments were classified into five strata using 0, 15, 30, 60 and 300 secondary school teachers[1] in the system as the lower limits of the five strata. Thus in the stratum composed of the largest communities there were only three school systems, but these had 22 approved departments. The group of next smaller systems (with 60-299 teachers) contained 23 approved departments, while the other strata contained 41, 87 and 76 departments respectively.

A sample of 22 departments was selected from each stratum except the one containing 23. From this stratum and the one containing only 22 approved departments, one teacher was selected from each department. To exclude human bias from the selection, it was specified that the teacher who had the largest number of classes of ninth grade pupils was the selected one unless there were several in the particular school who fulfilled this specification. In such cases the one selected was the ninth grade teacher whose surname's initial letter appeared earliest in the alphabet. Random numbers were used as the means for selecting the 22 sample members from the lists of 41, 87, and 76 department names in the other strata.

Of the 111 selected teachers, 90 agreed to participate, were visited and rated. The completed forms were not returned, however, by five of these. Two of these five discontinued teaching during the year, and the other three did not return the completed questionnaires and inventories for other reasons. The 85 teachers whose complete data were used in the summary and analysis were distributed among the five strata: 19, 17, 18, 16 and 15 in school sizes I, II, III, IV and V respectively.

---

[1] These were same limits used in stratifying the population used for obtaining the normative data in the 26-state area.

Rating Procedure

The rating of all the teachers was done by two Research Fellows both of whom had had considerable previous teaching and supervisory experience at the secondary school level. Rater A visited 50 schools in the fall and 18 in the spring, while rater B visited 22 schools in the spring. Five of those visited in the fall, two from each stratum II and IV and one from stratum III, did not provide complete inventory data. Table 63 shows the number of respondents rated by each visitor, classified by school-size.

Table 63. Number of teachers responding in classroom observation sample classified by school-size, rater, and time of rating

School Size	Autumn Rater A	Spring Rater A	Spring Rater B	Total
I 0-14	12	6	1	19
II 15-29	13	4	0	17
III 30-59	11	4	3	18
IV 60-299	9	2	5	16
V 300 & over	0	2	13	15
Total	45	18	22	85

In rating the teachers' classroom work, the following directions were followed by the raters. First, consider which, if any, of the 32 Criteria you actually have no opportunity to observe and mark these X. Second, consider what indications you see of each criterion. Are the evidences weak, strong or average? Third, consider how weak or how strong, and whether the observed phenomenon indicates a high or low average. A weak rating is 0 or 1, strong 4 or 5, and the average 2 or 3 depending upon your judgment of the quality and quantity of evidence that the criterion is being met in the observed situation. During conversation with the teacher find out about her use of the conference period and of home visits. Also determine the use made of the department by other class and non-class groups and whether the teacher keeps individual pupil folders and works with adult classes. In addition to these instructions, a list of commonly observed evidence worthy of rating 2 or 3 on each of the 32 Criteria was compiled and made available to the raters.

When the second rater began work several trial and training sessions were used to help the two raters work consistently. After training they both rated four different teachers independently to test their ability to agree. The difference between the two mean ratings for these four teachers were -.22, +.15, -.26 and +.20. Table 64 is an analysis of variance table showing that mean ratings assigned by raters did not differ significantly,[2] when Rater A's ratings were considered in two groups.

Table 64. Analysis of variance of classroom observation sample teacher ratings classified by time of rating and rater

Source of Variation	d.f.	Sum of Square	Mean Square	F
Among rating group	2	3.081	1.541	2.84
Within group	82	44.454	.542	
Total	84	47.535		

Table 65 shows the mean teacher ratings classified by school size group, rater, and time of year in which the teacher was visited. Even though the difference in mean ratings assigned by the two raters was not large, the correlation coefficients involving ratings reported in Table 66 below were adjusted for these differences by using deviations from rater means in both numerator and denominator of the correlation formula. This adjustment process[3] is similar to using the "within groups" mean square for estimating the variance and standard deviation rather than the sum of squares derived from the total in the analysis of variance table.

Table 65. Mean criteria rating for teachers in observation sample classified by school-size, time of rating, and rater

System Strata No. Sec. School Teachers in Entire Sch. System	Autumn		Spring				
	Rater A		Rater A		Rater B		Strata
	No.	Mean	No.	Mean	No.	Mean	Means
I Less than 15	12	3.26	6	2.98	1	2.80	3.15
II 15-29	13	3.04	4	3.48	0	----	3.14
III 30-59	11	3.39	4	3.08	3	3.50	3.34
IV 60-299	9	2.88	2	3.45	5	3.94	3.28
V over 300	0	----	2	3.60	13	3.57	3.57
Mean Rating		3.17		3.19		3.61	

---

[2] That is, the disparity in the means of raters was not larger than would be expected in random samples from a common population.

[3] See Lindquist, loc. cit.

Findings of the Classroom Observation Phase

The data collected on this small sample of observed teachers did not yield convincing results in terms of either the classroom rating or the mean pupil adjustment score for the teachers' specified classes. The intercorrelations among the seven attitude scores from this sample and from the normative samples as well as the relations of biographical data to attitudes give considerable information, however, relative to the meaning of the attitude scores.

Table 66. Intercorrelations among seven teacher attitude scores and three classroom criteria based on equal samples[a] from five school-size strata of Minnesota vocationally approved homemaking departments in 1958-59

Score	2	3	4	5	6	7	8	9	10
1. Total Classroom rating	.97[b]	.10	.08	.09	.10	.02	-.17	-.24[c]	-.13
2. Pupil & Learning Exp. Rating		.10	.08	.11	.11	.00	-.14	-.21	.01
3. What Would You Do			.06	.07	-.06	.09	-.14	-.10	-.04
4. School Community (SC)				.46[d]	.44[d]	.08	-.34[d]	-.35[d]	-.26
5. Profession (P)					.67[d]	.04	-.25[c]	-.41[d]	-.45[d]
6. Community (C)						-.02	-.16	-.32[d]	-.31[d]
7. Subject Matter (Sm)							.26[c]	.26[c]	.01
8. Homemaking Teacher Attitude Toward Children (HTAI)								.90[d]	.33[d]
9. Minnesota Teacher Attitude Inventory (MTAI)									.46[d]
10. Familiar Interpersonal Relations (F)									

[a] Samples contained 19, 17, 18, 16, and 15 cases in groups one to five respectively.

[b] Deviations from rater means were used for the correlations in rows one and two.

[c] Correlations of .22 or larger are significant at the five per cent level.

[d] Correlations of .29 or larger are significant at the one per cent level.

Table 66 shows the product moment correlation coefficients between the pairs of attitude scores and those between the attitude scores and the classroom ratings as well as with the mean-pupil score on the social and personal relations problems inventory entitled "What Would You Do."[4] The correlations in

---

[4] This form is described in Chapter II in the section on developing the inventories. The pupil score indicates the degree to which his choices of feelings and other behaviors correspond to those selected by the more mature adolescents surveyed.

Table 66 are based upon deviations from school-size sample means. The correlations in the first three lines of Table 66 show that only one attitude score can be considered significantly correlated with one of the Criteria Ratings and that at a doubtful level of probability, five per cent. That is, the score on the Minnesota Teacher Attitude Inventory may have a negative relation with the classroom rating assigned by the visitors using the Criteria of Classroom Effectiveness as their guide. Since most of the Minnesota Homemaking teachers had previously taken this Inventory for other research studies, this score may not have the predictive power for this sample that is typical of its predictiveness for teachers who had not previously taken the MTAI.

Though the sample estimates of the intercorrelations among the seven attitude scores have values differing somewhat from those shown by the much larger normative samples in Table 10, none of the differences are larger than expected from two independent samples from the same population. Since the correlation values given in Table 10 are based on much larger samples, it is preferable to use these estimates rather than those in Table 66.

Reliability of Classroom Ratings

Internal consistency coefficients of reliability of the mean classroom ratings of the teachers in the classroom observation sample were computed by using the two-dimensional analysis of variance procedure for separating the total variation among item ratings into the parts associated with variations among teachers, among items, and the interaction of individuals with items. The "interaction" part of the total variation becomes large when the ratings of individuals on any item are inconsistent with the ratings assigned on the same item to other teachers who have similar mean ratings. The "interaction" mean square is used as a measure of the discrepancy between the variance of the obtained mean rating and the "true score" on that rating. Table 67 shows the analysis of variance table for the mean rating on all areas covered in the Criteria of Classroom effectiveness for the whole observed group. In these ratings an item marked as "no opportunity to observe" was given the average rating of all items rated for that particular teacher. Since the raters were skilled observers and worked diligently, an average of less than 15 per cent of the items were omitted from the ratings. The reliability coefficient for the mean total ratings indicates a high degree of internal consistency among the ratings on all 32 items in the Criteria.

Table 68 shows a similar analysis of variance table for the ratings on the nine items of pupil behavior and the nine items relative to the qualities of the learning experiences. This group of ratings on 18 criteria showed nearly an equivalent

Table 67. Analysis of variance among mean ratings of teachers in the classroom observation samples and the items of criteria of classroom effectiveness

Source of Variaton	d.f.	Sum of Squares	Mean Square
Among Teachers	84	1517.1177	18.0609
Among Items	31	442.5600	
Interaction	2604	1736.4950	.6669
Total	2719	3696.1927	

$$r_{11} = \frac{18.0609 - .6669}{18.0609} = .96$$

Table 68. Analysis of variance among mean ratings of teachers in classroom observation samples on eighteen items of the criteria dealing with pupil behavior and qualities of the learning experience

Source of Variation	d.f.	Sum of Squares	Mean Square
Among Teachers	84	990.234	11.7885
Among Items	17	194.772	
Interaction	1428	849.425	.5948
Total	1529	2034.431	

$$r_{11} = \frac{11.1937}{11.7885} \text{ or } .95$$

degree of internal consistency as the total rating and seemed more directly indicative of the quality of the learning situations. Because of these considerations this mean rating was studied as a second criterion for judging the predictive power of the attitude scores. The sample estimates of the correlations shown in Table 66 did not indicate this was a useful criterion.

A third criterion used as an index of the quality of the learning situations was the pupils' mean score on the What Would You Do inventory given in one randomly selected ninth grade class of each teacher. These class means did not prove to be a useful criterion. An investigation of the general level showed that the means of strata were different with stratum IV the lowest and strata III and V next lowest.

Table 69 shows the strata means for class means without weighting the larger classes. Each stratum mean was based on over 200 pupils in 17 to 20 classes representing one indicant of the teachers' intructional effectiveness.

Table 69. WWYD means of classes in classroom observation samples from five school-system-size strata

Strata	No. Secondary Teachers	N	Mean of Class Means on WWYD
I	0 - 15	19	11.022
II	16 - 30	20	11.267
III	31 - 60	20	10.791
IV	61 - 299	17	9.005
V	over 299	17	10.419

Table 70 shows the significance test for the differences among the strata means reported in Table 69. This test indicated that means of classes in the five strata were different. Hence when correlations between WWYD class means and teacher attitude measures were calculated (and reported in Table 66) deviations of each individual class from its respective stratum mean were used. In these samples the correlations were all so low that none was considered different from zero.

Table 70. Analysis of variance among class means on WWYD for classroom observation samples from five system-size strata

Source of Variation	Sum of Square	d.f.	Mean Square	F
Among Strata	56.6285	4	14.1571	3.75**
Within Strata	331.8861	88	3.7714	
Total	388.5146	92		

** $P < .01$

The observed differences among strata may indicate that the pupils who take homemaking in the larger schools are the ones who need instruction in personal and social adjustment[5] or it may indicate that the mores of larger communities are such that high achievement in WWYD is more difficult to accomplish in such a setting. The existence of such conditions can be investigated by collecting pre-test and post-test data from homemaking pupils in communities of different sizes and with differing bases for "electing" homemaking courses.

Since correlations are always attenuated by the unreliability of the measurements an internal consistency coefficient of the reliability of the WWYD class means was calculated. Table 71 shows the calculations. This measure indicates that the reliability of WWYD class means was, indeed, low and may be responsible for the low correlations observed.

---

[5] Preliminary pre-test, post-test data collected by a graduate student using a different measure of pupil adjustment indicated that the larger schools have a higher percentage of pupils with low pre-test adjustment scores than do small schools.

Table 71. Analysis of variance among item means and teacher class means on WWYD based on sample of nineteen teachers in stratum I

Source of Variation	Sum of Square	d. f.	Mean Square
Among Teacher Means	1.580928	18	.08783
Among Items	46.799813	47	
Interaction	44.200045	846	.05225
Total	92.580786	911	

$$\text{Reliability coefficient} = \frac{.08783 - .05225}{.08783} \text{ or } .41$$

CHAPTER V

SUMMARY OF RESULTS AND IMPLICATIONS

Results

In this study five attitude inventories for homemaking teachers and one for secondary school pupils were developed. Decile norms for teachers in vocationally approved departments in five school-size strata were given for each of the five new teacher inventories, for the *Minnesota Teacher Attitude Inventory*, and for a selected group of 75 items of the latter, called the Homemaking Teacher Attitude Inventory (HTAI in this report). In addition the intercorrelations among the seven teacher attitude scores were given for the 712 teachers in random samples selected from the five school-size strata. Likewise an internal consistency measure of the reliability of each of the seven teacher attitude scores was given for a small random sample of teachers from the smallest school-size stratum.

In addition, a list of 32 *Criteria of Classroom Effectiveness* was developed in cooperation with a jury of eleven leaders in the field of homemaking education. Although the members of the jury assessed the importance of each criterion, the compilation was the responsibility of the investigators. The jury members gave some attention to the comprehensive character of the list but the investigators must assume responsibility for any inadequacies in the coverage.

Prospective users of this form should be aware of the great difficulties in communication among observers and interpreters of the Criteria. For example, what one individual will consider an indicator of Criterion six: "Pupils recognize and accept differences among cultural groups as *desirable* in our society" may differ considerably from another individual's interpretation. The form suggests a half-dozen or more common indicants of each criterion. These were given to help alleviate difficulties of communication yet great latitude remains for the user. Before two or more observers can expect to obtain similar records of the same classroom situation they will need considerable training, practice, and much clarification of reasons for any discrepancies in their records on trial observations of the same class situation.

In the two phases of this study in which these Criteria were used, difficulties of communication were probably not solved adequately though the second use, in the classroom observation phase, was improved greatly over that in the first phase of the study. As an observer used these criteria over a period of weeks precautions were taken to prevent a shift or drift of standards in the latter phase. It was found helpful for the observer to accumulate weekly records of examples of indicants rated at different levels for each Criterion. Thoughtful review and supplementation of these lists were found useful for inducting a new observer and for aiding the experienced observer to maintain diurnal consistency.

If a prospective user of these Criteria wishes to interpret the ratings assigned by several raters, it would be desirable to randomly assign classroom situations to observers so that differences among observer's records can be expected to follow a specifiable probability distribution. Even though differences in mean ratings of observers are found to be small it is probably desirable to characterize the rated aspects of the classroom situation by deviations from the particular rater's mean.

These difficulties and others have been considered so nearly unsurmountable by certain other investigators of problems involving criteria of teaching effectiveness that different types of observation forms have been developed. Examples of these are the forms developed by H. H. Anderson[1] and the OScAR devised by H. Mitzel and D. Medley[2] in their studies in Teacher Effectiveness. This type of observation schedule does not require the observer to make as complex assessments as the one developed in this study, but, nevertheless, much precaution and observer training are necessary in order to assure consistency among the results from several observers. Even after consistent records of the specified characteristics of the classroom situations are obtained, it is necessary in assessing the effectiveness of the specific situations to impose criteria as bases for their evaluation either individually or in combination.

The pupil relationships inventory developed in this study, What Would You Do, is described in Chapter II. The list of typical interpersonal problems of this inventory was initially presented to beginning college freshmen who provided responses that were subsequently built into the multiple-choice form of the inventory used in the last two phases of this investigation.

The data on this inventory collected in the observational phase of the study indicated that the teachers' class means had higher averages for the random samples from the three smaller school-size strata, (60.6, 60.5, and 57.7 respectively) than for the larger-size strata, (40.7 and 53.0). An analysis of variance test indicated the differences among means were significant at the one per cent level. This finding indicated that girls who took homemaking in the larger communities did not achieve as well on this measure as those in the smaller communities. These differences among pupil means might be a reflection of different policies of pupil selection or guidance, differences in instructional programs and/or differences in the social mores in communities of different size.

---

[1] Anderson, H. H., "Study of Certain Criteria of Teacher Effectiveness," Journal of Experimental Education, 23, (September 1954) 47-71.

[2] Medley, D. M. and Mitzel, H. E., "A Technique for Measuring Classroom Behavior." Journal of Educational Psychology, 49, (April 1958.) 86-92.

Although the preliminary study of the instrument indicated that mean scores for the selected classes of the teachers in the Central Region samples had a low correlation with classroom ratings, the data collected in the observational phase yielded only non-significant correlations of What Would You Do class means with classroom ratings and with the seven teacher attitude inventory scores. This lack of relationship indicates that the usefulness of the What Would You Do inventory is limited until more supportive data are available and/or the inventory is improved.

This study provided normative data for inservice Homemaking teachers on the Minnesota Teacher Attitude Inventory. Random samples ranging in size from 115 to 190 were obtained from the five school-size strata. The sample means shown in Table 25 were judged significantly different among school-size strata with the higher means for teachers in the larger school systems.

A subgroup of MTAI items was selected for study since there had been some question as to whether all items were appropriate for homemaking teachers. Selection was made on the basis of the frequency of response by the highly effective teachers. This process of item analysis yielded 75 scorable items for the HTAI.

The relations of this HTAI score to classroom ratings and the attitude inventories were studied. This subgroup consisting of just half of the original 150 items had an internal consistency reliability coefficient of .82 as compared to one of .91 for the MTAI score. These coefficients of reliability are related as one would expect if the sample of scored items was like the unselected items. Furthermore, the correlation coefficient of .90 between the two scores, when considered in the light of the reliability coefficients, indicated that the HTAI score was measuring the same psychological characteristic of the teachers as the MTAI. Even though the observed correlation in the norm group was not quite as large, it seems appropriate to recommend that the new subscore be dropped from further consideration and the original MTAI used for assessing homemaking teachers' attitude toward pupils.

A new attitude inventory called F, Familiar Interpersonal Relation, consisting of 41 items was developed and administered to all teachers in this study. The score on this was found to be positively correlated with MTAI and HTAI to the extent of .46 and .33 in the observation samples and .43 and .34 in the norm groups. The internal consistency reliability coefficient was .84, a high value for an inventory of this length. Since few of these items deal with the usual material of instruction in teacher education programs this kind of item may be more useful than the less subtle ones if a selection instrument is to be devised. This inventory needs more items to increase its reliability if the scores of individuals are to be used for decisions of selection and placement. This inventory appears to give a subtle measure of a characteristic somewhat similar to that measured by the MTAI.

A second teacher attitude inventory developed in this study was the one called Sm, that is, attitude toward subject matter. There was no evidence that the scores on this inventory were related to classroom rating or to the mean score on the pupil problem inventory, What You You Do. It did show, however, a low positive correlation with MTAI and HTAI. The mean scores on this inventory gave some evidence that the teachers in the three larger school-size strata had higher mean Sm scores than those in the smaller schools, and thus indicated a higher mean level of similarity of teachers' preference for subject matter to that chosen by the high criterion group. The research indicated that improved reliability is needed on this inventory before it is usable for individual prediction.

The other three teacher attitude inventories developed in this study are C, Sc, and P, attitudes toward the community, toward the school and coworkers, and toward the profession. The internal consistency reliability coefficients for these scores were lower than desirable, .83, .51 and .62 respectively. Although these three inventories were positively correlated with one another the reliability coefficient for the combined score was only .78, somewhat lower than that for one of its parts, attitude toward community. These three inventory scores had low positive intercorrelations (approximately .40) but were negatively related to a significant degree to the three, MTAI, HTAI and F.

The validity data currently available on these three attitude inventories are chiefly of content type. Each inventory contains attitudinal items whose contents are classifiable in the categories indicated by the inventory names. Further empirical data need to be obtained to show that high scores on these inventories are actually obtained by those teachers whose attitudes are especially favorable in areas indicated. The lack of such information about these inventories limits their current usefulness but none of the available information is unfavorable to their use for further study.

Norm data for these inventories are provided on samples of varying sizes from five school-size strata. The teachers in these samples were reclassified according to several important biographical characteristics so that norm data on their attitude scores are also provided in several such categories, as length of experience, type of school organization, and participation in programs of teachers' workshops.

Analysis of variance tests concerned with the means of samples drawn from the five school-size strata indicated that attitude toward community was the only one of these three whose means differed sufficiently to be considered significant. That is, the school-size stratum three had the highest mean of 23.0 with strata two and four next having means of 22.7 and 22.4. The mean for the teachers in the largest communities was lowest, 21.8 with the smallest communities having a mean of 22.1. These mean differences seem to be arranged in an order of magnitude that is reasonable to expect in communities of various sizes.

Biographical Information

The biographical data sheets yield the following information concerning the 712 teachers who provided complete data for the study. Since the samples constituted a higher proportion of homemaking teachers from the larger communities the percentages of the respondents give undue weight to teachers in the larger school systems. If the population of concern is taken as the 1958-59 homemaking teachers of ninth grade classes in the vocationally approved departments of the white public schools of the 26-state area, then estimates of the population percentages can be found by using the weighting factors 5, 3, 2, 2, and 1 for strata I to V respectively. These are approximations to the relative sizes of the number of teachers in the population represented by each member of the five random samples. When these weights were applied to certain frequency data collected in the normative phase, population estimates were obtained for the items reported below.

More than two-thirds of the respondents were married or divorced. Married women with children comprised the largest group. The population estimate of the percentage married, widowed, or divorced is 74. Thirty-nine per cent were in the category 'married and have children'.

Two-thirds of the respondents believed teaching to be "far the best" or "the best" profession, although one-third had reservations. Population estimates were 64 and 36 per cent respectively.

A medium of 43 hours per month were spent on 13 specified extra-class activities.

Forty per cent of the group were serving or had served as supervising teachers. Half of this number had no preparation of any kind for supervision. Population estimates were 34 and 50 per cent respectively.

The assignment of most respondents was that of teaching homemaking to girls only. Somewhat more than one-third contributed to an adult as well as to the secondary school program. Population estimates were 71 and 42 per cent respectively.

Department facilities were considered to be adequate by 42 per cent and inadequate by 23 per cent of those responding. Population estimates were 37 and 24 per cent respectively.

Pupil relationships in schools were perceived as good or excellent by the majority of teachers. For the population, this percentage was estimated as 86.

Slightly more than three-fourths of the respondents had college courses beyond the B. S. or B. A. and about one-fourth had earned a Master's degree or its equivalent or more. For the population, the estimates were 72 and 22 per cent respectively.

Course work had been taken by 44 per cent of the respondents within the past year and by an additional 40 per cent withing the past five years. Population estimates of the percentage were 45 and 47 respectively.

Approximately 42 per cent of the respondents actively participated in a short state or district conference for homemaking teachers while 17 per cent did not attend a conference. Population estimates were 40 and 17 per cent respectively.

Two-thirds of the group said that the state supervisory staff gave constructive help. Seven per cent were unaware that there was a state supervisor. Population estimates were 65 and 6 per cent respectively.

Implications

What do these findings mean to the practitioner -- the teacher educator and the supervisor whose concerns are with the development of effective programs of home and family life education? The negative relationship between the pupil-centered attitude inventories and ratings on the criteria for effective classroom learning situations must surely raise questions. As professionals in the field, do we perceive in situations more than is actually there? Do we bring to observations, unconsciously, recollections of more or less skillful performances by the teacher in a non-class situation? Admittedly the maintenance of a good classroom learning situation involves attitudes other than those relating to rapport. Is it conceivable that these other attitudes should bear more relationship to classroom learning in homemaking? It is an area needing further study.

The differences in pupil performance on the What Would You Do inventory form a basis for conjecture. The device is essentially one to measure the ability to identify reasonably appropriate solutions to human relationships problems. This particular ability is one which appears repeatedly in some form on lists of objectives for homemaking classes at many levels. Moreover, human relations teaching is often reported to be integrated with other areas of home economics subject matter. The over-all lack of relationship between criteria scores and the performance of pupils on this inventory as well as the low but positive relationship shown in certain school-size strata make for ambiguity. Is there need to examine teaching procedures in this area? Is the integration effective or is the material treated so superficially that it is not learned? Further, what pupils benefit from such instruction? At all points, answers are needed.

Maintaining a desirable learning situation in the classroom is a complex operation. It is common knowledge that pupils make progress in working with teachers who are very different in nature and that pupils respond differently to any given teacher. Some such differences were pointed up in this study. Few of the teachers rated high in all attitude inventories but did score high in clusters of three or four inventories. Whether there is a cluster which typifies the most able homemaking instructor remains to be seen after further refinement of procedures. However, the results suggest that those in teacher education institutions may find the use of inventories helpful, if they are interpreted with caution, in selecting candidates for admission to the teacher education program.

Biographical data reflect a need for certain aspects of inservice education. First, the lack of preparation of supervising teachers for their very important work indicates a need for rethinking the responsibilities of state departments of education and teacher education institutions for the provision of educational opportunities as well as for ways and means by which this work can be carried out. Second, both the disparity in length of teaching experience of respondents and the very large proportion of married teachers with families suggests the need for a review of inservice education procedures effective for such divergent groups.

APPENDIX A

		Page
A-1	Criteria of classroom effectiveness	88-90
A-2	Teacher data sheet	90-92
A-3	Form CP	93-99
A-4	Form SS	100-105
A-5	What Would You Do?	106-113

DIRECTIONS: Please respond to each item in the lists below. A code for indicating your responses precedes each group of items.

The following items are concerned with the amount of time you spent on non-class activities during the past month. Please indicate the amount of time for each activity by means of the following code:

0 indicates no time spent
1 indicates some but less than one hour
2 indicates between 1 to 4 hours
3 indicates between 4 to 12 hours
4 indicates more than 12 hours

____ 6. home economics club or FHA
____ 7. class adviser
____ 8. home visits and guidance of home experiences
____ 9. school money-making projects
____ 10. responsibility for school functions
____ 11. study halls
____ 12. home room period
____ 13. clerical work
____ 14. hall duty
____ 15. hot lunch program
____ 16. counseling activities, excluding home experiences
____ 17. care of laboratory
____ 18. committee and staff meetings
____ 19. and 20. (do not mark this space)
____ 21. attendance at concerts, plays, exhibits, lectures
____ 22. reading (other than direct class preparation)
____ 23. sewing, cooking, knitting, crafts, etc.
____ 24. parties, dances, bridge, etc.
____ 25. social service organizations
____ 26. and 27. (do not mark this space)

During the past year, what experiences have you had which lead to professional improvement (non-college credit)? Please use the following code:

0 if you have had no opportunity
1 if you had opportunity but did not attend
2 if you have attended but did not share on the program
3 if you have shared on the program

____ 28. conferences or institutes for home economics teachers (one or more days)
____ 29. workshops for home economics teachers (at least one week)
____ 30. conferences, or institutes, for teachers in several fields
____ 31. conferences, or institutes, for your local school faculty

Please indicate below the number of graduate courses taken in each of these areas: (do not count any courses more than once, but try to classify each course according to its principal emphasis.) PLEASE DO NOT LEAVE ANY BLANK EMPTY. PLACE A ZERO IN THE BLANK IF YOU HAVE NOT HAD A COURSE.

____ 32. Child development, child psychology
____ 33. Personal and family relationships
____ 34. Home economics education
____ 35. Education, guidance, mental hygiene, psychology, and sociology
____ 36. Foods and nutrition
____ 37. Textiles and clothing
____ 38. Related art

____ 39. What is the approximate population (adults and children) of the school district in which you teach?

1. less than 499
2. between 500 - 999
3. between 1000 - 2499
4. between 2500 - 4999
5. between 5000 - 11,999
6. between 12,000 - 34,999
7. between 35,000 - 99,999
8. between 100,000 - 700,000
9. over 700,000

____ 40. What experience have you had in the supervision of student teachers?

1. no experience
2. have supervised this year but have had no special preparation for supervision
3. have supervised this year and have had special preparation
4. have supervised in the past years (not this year) but have had no special preparation for supervision
5. have supervised in the past years (not this year) and have had special preparation

____ 41. What are your present class responsibilities?

1. home economics and other subjects for boys and girls
2. home economics and other subjects for girls only
3. home economics for boys and girls
4. home economics for girls only

____ 42. What is your responsibility during the year for homemaking education with adults?

1. none
2. non-class unit with central theme
3. one series of 6 - 10 lessons
4. more than one series
5. combination of class and non-class

____ 43. What age group would you like best to teach?

1. preschool
2. elementary only
3. junior high school
4. senior high school
5. junior and senior high school
6. adults

____ 44. What is the total (combined) enrollment in all of your classes (not including classes of adults) the present semester?

1. less than 25 pupils
2. 25 to 49 pupils
3. 50 to 74 pupils
4. 75 to 99 pupils
5. 100 to 124 pupils
6. 125 or more pupils

___45. What level of home economics classes do you teach this semester

1. junior high school only
2. senior high school only
3. junior and senior high school

___46. How adequate are the space and facilities in your home economics department ?

1. adequate for all areas of homemaking instruction
2. adequate for some classes or for some phases only
3. inadequate for my work but school has plans for improvement
4. inadequate for my work and no plans for improvement

___47. Which statement is most representative of your experience with your principal?

1. tells me what to do
2. helps me work out problems
3. leaves me alone
4. gives me suggestions as I ask for them

___48. Which of the above statements is most representative of the experience you would prefer to have with your principal?

___49. What is your predominant reason for deciding to be a teacher?

1. like children
2. like to teach things to other people
3. it seemed a convenient way of living
4. under the circumstances, it suited best for getting through college
5. influence of counselors and advisors
6. cultural and idealistic reasons
7. parents and/or close relative(s) were teachers(s)
8. other (specify)____________________

___50. Which statement is most representative of your experience with state or assistant state supervisor or itinerant teacher trainer in home economics?

1. indicates how and what she thinks I should do
2. helps me find ways to solve problems I ask about
3. makes me aware of new problems and ways I can improve
4. encourages me to carry responsibility for assisting in state, district, or city programs
5. gives help only through mail correspondence or group conferences
6. gives little or no help
7. I do not work under such a supervisor

___51. Which of the above statements is most representative of the experience you would prefer to have with your state or assistant state supervisor or itinerant teacher trainer in home economics?

___52. Which statement in No. 50 is most representative of your experience with your local supervisor?

___53. If you had a local supervisor, which statement in No. 50 would be most representative of the experience you would prefer to have with your local supervisor?

___54. What is the length of your home economics teaching experience, including the current year?

1. less than one year
2. one to less than three years
3. three to less than five years
4. five to less than ten years
5. ten to less than twenty years
6. twenty years or more

___55. How many credits have you earned beyond the bachelor's degree?

1. none
2. some graduate work but less than half the credits for a master's degree
3. less than a master's degree but more than No. 2
4. a master's degree or equivalent amount of credit
5. more credit than required for a master's degree

___56. Including the present school year, how many years have elapsed since you last earned any college credit ?

1. less than one year
2. one to less than three years
3. three to less than five years
4. five to less than ten years
5. ten to less than twenty years
6. twenty years or more

___57. What is the characteristic of your present status?

1. single
2. married, no children
3. married, have children
4. widowed or divorced, no children
5. widowed or divorced, have children

___58. Which category below applies to the special honors you earned at college graduation?

1. none
2. with distinction
3. with high distinction
4. cum laude
5. magna cum laude
6. summa cum laude

___59. What are your plans for next year?

1. continue teaching in the same position
2. continue teaching in a new position
3. continue teaching and try to advance
4. continue teaching part-time only
5. quit teaching temporarily for the purpose of further study
6. quit teaching and take a job in a different field
7. quit teaching for reasons not directly connected with teaching career (marriage, illness, etc.)
8. no particular plans; will probably continue teaching at least for next year
9. other (specify)

____60. **What is the general relationship among students in your school?**

1. **extremely good; harmonious relationship and excellent student morale**
2. **good**
3. **fair; the students are indifferent to one another; no serious tendencies for clique formation**
4. **extremely poor, there is marked dissention and rivalry among the students**

____61. **When did you decide to become a teacher ?**

1. **always wanted to be a teacher**
2. **in grade school**
3. **in high school**
4. **first year in college**
5. **second year in college**
6. **third year in college**
7. **fourth year in college**
8. **after college**
9. **other (specify)____________________**

____62. **How do you like a teaching career, generally speaking?**

1. **excellent, by far the best**
2. **very well, definitely the best**
3. **well, probably the best**
4. **not too well, would like some others better**
5. **dislike it, would like to quit**

____63. **How do you like your present teaching position?**

1. **excellent**
2. **very well**
3. **well**
4. **not too well**
5. **dislike it**

____64. **What is the policy of your school administration (superintendent, principal, school board) toward a teacher's private life?**

1. **no restrictions at all**
2. **no definite restrictions, but some suggested codes of behavior.**
3. **some definite restrictions**
4. **quite a few definite restrictions**
5. **a strict set of definite restrictions**

DIRECTIONS FOR USE

All ratings should be based on evidence obtained by visitation in the teacher's classroom. Each criterion is followed by a suggested list of observable behaviors. This list is not intended to be comprehensive but merely representative. Not all of the examples would be observable in any one class but some such evidence should be observable for a teacher to receive a positive rating. One half-day visit would be considered a minimum in observation time. It is suggested that supervisors familiarize themselves with this form so that it will not be necessary for them to refer to it during the visit. A summary card with blanks for recording notes may be taken to the classroom and will be useful in preparing your ratings of each teacher. A six-point scale is provided for indicating your rating on each of the 32 criteria. For each teacher write one of the numbers below in the blank preceding the number of each criterion:

X—no opportunity to observe

O—complete ABSENCE of trait during observation period

1—trait is SPASMODIC or present in only a few pupils and/or on a few occasions during observation period

2—rating nearer to 1 than to 4

3—rating nearer to 4 than to 1

4—trait is ROUTINE in most of the classroom activities and present in most of the pupils during observation period

5—trait is an INHERENT PART of the classroom and involves all pupils during observation period

INTRODUCTION

The 32 criteria listed on this form deal mainly with the homemaking teacher's classroom activities. Though other aspects of her behavior may be very crucial at times in relation to her "goodness" as a teacher, this list focuses the rater's attention on the interaction between teacher and pupils as they engage in activities intended to aid pupils in developing skills, understandings, attitudes and other desirable behaviors. Achievement of pupil goals depends to a great extent on the teacher's guidance in the selection, definition and emphasis of objectives and upon her ability to guide the planning, organization, use and evaluation of pupil learning activities. This list of criteria, therefore, includes items relative to the qualities of such activities. In addition to the above phases of her work, she must perform skillfully, with psychological insight and with appropriate emotional tone in her contacts with pupil groups and individuals.

These criteria have been classified into four categories in an attempt to facilitate observation. A visitor in the department can concentrate her observation on certain qualities of the teacher, the pupils, the learning experiences or the physical surroundings of the department. Obviously, in some instances, visitors will find that observations of qualities in one category will enable them to infer the status of certain qualities in a different category.

A visitor's ratings will be most dependable if they possess a high degree of accuracy, adequacy and objectivity. Accuracy is improved as raters are able to base ratings on observable facts rather than on "hearsay". Ratings possess adequacy as they are based on "usual" behavior rather than on isolated instances. A higher degree of objectivity is achieved when ratings are free from personal bias and prejudice and are based on observed behaviors rather than on the emotional reactions of the rater. Though in no case can perfection be expected, it is obviously useful to have ideals in mind as the criteria are applied to specific cases.

THE TEACHER

____ **Criterion 1: The teacher shows impartial behavior to all pupils.**

Indications: The teacher bases criticism and praise on actual performance; does not criticize pupils before others, but evaluates their work objectively; does not have favorites or give special consideration without reason to individuals or groups; accepts pupils regardless of handicaps, race, creed and social or economic position; accepts behavior of pupils on the basis of their maturity rather than physical development; is willing to admit her own mistakes; is straightforward and direct in manner. The general feeling among the pupils is that the teacher is approachable and helpful.

____ **Criterion 2: The teacher maintains a pleasant, self-confident appearance.**

Indications: The teacher is kind and understanding of pupil's feelings and differences; shows calmness and freedom from excessive or undue nervousness, tension, or restlessness; is casual and informal yet always in control of the situation; is calm as a result of ability to make decisions rather than indifferences or lack of vigor; shows a sense of humor; may joke with pupils at times; exhibits warmth to pupils and mingles with them in a friendly fashion; has pleasant speech; shows pleasure in seeing pupils as they enter the room.

____ **Criterion 3: The teacher is calm, poised and self-controlled UNDER PRESSURE and in emergencies.**

Indications: The teacher remains calm and collected in the face of UNANTICIPATED situations; faces emergencies with objective view of necessary adjustments keeping the welfare of the group rather than her personal preference or convenience in mind; converts emergencies into learning situations—as when a child falls in play school; is self-assured rather than self-conscious; does not lose power of reasoning in a tense or strained situation; has anticipated possible difficulties and considered courses of action; thinks through situations before acting; delays action when it is appropriate to do so.

____ **Criterion 4: The teacher is appropriately groomed and dressed for both general and laboratory classes.**

Indications: The teacher exhibits good taste and a high standard of grooming in classroom dress; wears attractive, sanitary, safe and homelike attire in the laboratory; considers color and design combinations in general schoolroom dress; seeks by example to stimulate pupils in improving their appearance in an appropriate manner.

____ **Criterion 5: The teacher offers guidance and mature direction to pupils.**

Indications: The teacher sees that classroom activities are organized effectively; is alert to behavior of all pupils; combines strength with humility and understanding; is keen, intelligent but not conceited or unkind; shows evidence of leadership but not domination; encourages pupils to plan their own work to meet their own needs; carries on classwork within a pre-planned framework. The pupils understand what is expected of them.

_____ **Criterion 6: The teacher seeks new resources for improving her teaching.**

Indications: The teacher is ambitious for her pupils and her profession as well as herself; is forward looking in her faith in education; is intellectually curious; collects and selects with discrimination teaching aids and techniques suggested in conferences, workshops, pamphlets and magazines; surveys and uses agencies and services available to pupils; participates in workshops or conferences for teachers; attends summer school, night classes, commercial demonstrations, exhibits, etc.; is proficient in such skills as management, relationships and art; participates in professional organizations; seeks to improve her background in fields outside of home economics, as philosophy, music, etc.

_____ **Criterion 7: The teacher recognizes and respects individual abilities, rights and responsibilities.**

Indications: The teacher knows something of pupil's interests, peculiarities, and background; understands the varying home standards and procedures that come from different cultural and economic groups; recognizes that some pupils learn rapidly but that others may require a longer time; adjusts assignments to current circumstances and to ability of pupils; shows tolerance and seeks causes for immature behavior; is sensitive to feelings of others; listens attentively to suggestions and opinions of pupils; helps pupils clarify their thinking when expressing opinions or making suggestions; encourages communication of ideas; does not attempt to impose own standards on individuals and families; helps individuals and families to find effective ways of solving their own problems.

_____ **Criterion 8: The teacher maintains individual pupil folders of records.**

Indications: The teacher keeps individual folders on file which include a record of personal data, pertinent facts about home situations gained from home visits, reports on home projects, self-rating scales, plans for improvement, samples of work, anecdotal records pertaining to attitudes toward children, ability to work in groups, etc.; records standardized test scores if school makes them available.

_____ **Criterion 9: The teacher uses teaching techniques best suited to subject matter, interests and abilities of pupils and type of classes.**

Indications: The teacher employs several types of effective teaching techniques as—discussions, panels, symposiums, demonstrations, committees, field trips, etc.; arranges classroom for greatest effectiveness of each technique; shows ingenuity in construction and use of illustrative material; provides for development of generalizations and their continued application; uses the preparation of some teaching material as learning experience for pupils; maintains a comprehensive, current, organized and available file of illustrative material; guides pupils in taking each step in the learning process.

_____ **Criterion 10: The teacher provides adequate and concise explanations.**

Indications: The teacher presents adequate explanations in terms of ability level of the pupils; presents directions in logical steps with some accompanying visual summary such as a blackboard listing, mimeographed outline or chart of directions; provides opportunity for pupils to ask questions and make suggestions; demonstrates new procedures; guides pupil observation—as on field trips or nursery school; directs planning so that the pupils know what to do when they work in the laboratory.

_____ **Criterion 11: The teacher uses conference period and home visits for guiding individual and group progress toward goals.**

Indications: The teacher supplements classroom activities regularly with individual or group conferences; uses definite but flexible plan for scheduling of conferences; attempts to see each pupil individually at least once a semester; times conferences and home visits according to pupil needs; uses conferences for purposeful rather than casual contact with pupils and their families.

_____ **Criterion 12: The teacher extends her own resources and the departmental facilities to school and community groups other than her own classes.**

Indications: The teacher shares bulletins and pamphlets with other groups; uses requests for assistance from other groups as an opportunity for education rather than service—as providing a meal pattern for the church buffet rather than planning the menu; is alert to opportunities to help other groups achieve certain of the instructional goals she sets for her pupils; serves as consultant for school activities, church groups or extension groups; sets policies with administration for use of facilities to safeguard educational function of the homemaking department; encourages homemaking pupils to assist outside groups with use of departmental facilities; is helpful but modest; works with adult classes and other groups working on problems related to homemaking; interprets home economics and her own educational services.

THE PUPILS

_____ **Criterion 1: The pupils exhibit enthusiasm for and satisfaction in homemaking experiences.**

Indications: The pupils spontaneously report application of class learnings to their homes, school and community; report ways that learnings in homemaking have contributed to their own personal development; plan home experiences with enthusiasm; show pride in work done; request to work on or show class projects during free periods—as an indication of real enthusiasm rather than "apple-polishing"; begin work in laboratory period without being told to do so; seldom indicate their work in homemaking as "hum-drum" or uninteresting; share information with pupils outside of the homemaking class; relate classroom experiences to out-of-school activities.

_____ **Criterion 2: The pupils participate in the evaluation of individual and group progress.**

Indications: The pupils use self- and group evaluation devices to check progress toward goals—as a check sheet on "Do I have the information I need before serving as a hostess at the freshman reception?"; accept evaluation as an important step in the learning process, not as something to be dreaded and avoided; use evaluation devices to do objective, accurate rating of their own and others' work; regularly evaluate progress and make plans for next steps, next projects or needed review and restudy; use discovery of causes of unsuccessful performance as a basis for improvement; accept the fact that though grades may be based on achievement, their interpretation must be made in the light of individual talents and adequacies; participate in arriving at means of evaluating.

_____ **Criterion 3: The pupils are all personally involved in classroom activities, both in planning and in doing.**

Indications: The pupils see classroom activities as problems to solve or projects to carry through rather than as assignments from the teacher; share experiences and learnings through group activities; spontaneously help plan and give suggestions; assume responsibility for carrying out plans for classroom management; volunteer for special tasks; dust, water flowers, arrange bulletin board, etc. with a sense of personal interest and without specific reminders; contribute independent ideas to discussions; work independently on personal projects.

_____ **Criterion 4: The pupils share the responsibility with the teacher for deciding upon and maintaining acceptable standards of conduct.**

Indications: The pupils use opportunities for self-government; give evidence that standards of conduct are understood and are to the best interest of all pupils; take responsibility for an orderly and efficient beginning of the class; prepare and use a "clean-up" schedule after laboratory classes; wait for the class to be dismissed after the bell rings; take responsibility for arranging chairs and cleaning table areas before leaving the room; respect class or school decisions as to gum chewing, talking, dress, etc.; complete assignments on time or make special arrangements for extension of time; care for own laboratory equipment and accept responsibility for its loss and misplacement; make arrangement with teacher for outside time needed on laboratory or committee projects.

_____ **Criterion 5: The pupils set up appropriate goals and plan suitable learning activities with the teacher.**

Indications: The pupils seem to be aware of the goals toward which they are working and to accept the worthwhile nature of the goals; know something of what is required to achieve their goals; relate immediate activities or project to larger goals; talk about relationship between home experiences or FHA projects and classroom goals; plan and carry out FHA programs so that they contribute to accepted goals.

_____ **Criterion 6: The pupils recognize and accept differences among cultural groups as DESIRABLE in our society.**

Indications: The pupils show interest in learning to prepare and enjoy foods of other cultural groups; invite individuals to demonstrate the preparation of foreign foods or typical crafts of their own cultures; arrange for exhibits of foreign costumes as a means of understanding other cultures and of broadening their own experiences; show concern for problems of other economic and social groups; recognize differences in practices among individuals and families within the community and accept the right to be different.

_____ **Criterion 7: The pupils show understanding of and consideration for the points of view, attitudes and problems of other individuals.**

Indications: The pupils suggest class projects that are of service to other age groups—as a party in an old people's home or a nutrition display in the grade school cafeteria; respect the teacher's right to require certain standards of behavior; acknowledge imperfections and errors which occur in their own and others' behavior; seek the cause of others' behavior rather than condemning it; discuss differences in points of view without rejecting the people who disagree; are constructive in suggesting means for themselves and others to avoid errors or overcome weaknesses; respect the opinions and statements of others in the class; work cooperatively with pupils outside of their own clique group.

—— **Criterion 8: The pupils are psychologically secure regardless of their individual inadequacies.**

Indications: The pupils compliment others for good work and/or growth; use comparisons among the work of individuals to inspire rather than to deride; evaluate their own and others' achievements in the light of the doers' special talents, abilities and personal goals; seem to be aware that people differ in interest, ability, experience and achievements; consider their goals reasonable; do not belittle one another's achievements; do not exhibit their achievements boastfully.

—— **Criterion 9: The pupils are so inspired by classroom activities that individuals explore unassigned aspects of homemaking in other home and school activities.**

Indications: The pupils establish home practice experiences of their own volition; ask questions that show curiosity about homemaking problems; voluntarily seek out many resources in the solution of the problem; relate material to experiences in other classes; apply learnings from one homemaking project to another; make use of available learning resources; enroll in elective classes in homemaking.

THE LEARNING EXPERIENCES

—— **Criterion 1: The learning experiences provide opportunities for practice in leadership and cooperation.**

Indications: The learning experiences encompass discussions, committees, debates, panels, elections, cooperative planning, etc.; rotate leadership positions; prepare pupils for assuming leadership responsibilities; show pupils the importance of the roles of the workers who carry out the project; are planned by pupils and teacher to enable pupils to carry them through to conclusion; provide opportunities for pupils to see the results of many of their decisions and to share in the consequences; allow individual or group choices if educational needs can be met with the resources available—including the teacher's time. Home and school experiences enable pupils to cooperate in the solution of problems in their own homes.

—— **Criterion 2: The learning experiences increase the depth and breadth of pupil learning through a variety of home economics activities.**

Indications: The learning experiences include audio-visual aids to enrich the experiences of the pupils; integrate problems of relationships, art, health, management and consumer education into each unit; make use of community resources to expand the pupil's experiences; incorporate classroom situations which help pupils identify problems and plan ways to solve them; include provisions for many resource materials that are organized to be easily accessible to the pupils; encourage pupils to find the different ways in which people meet varying situations.

—— **Criterion 3: The learning experiences provide for regular and consistent self-appraisal of pupil achievement and progress.**

Indications: The learning experiences make use of frequent and timely opportunities for self-evaluation during the course of the project instead of exclusive terminal appraisal—as the use of rating scale on social etiquette THROUGHOUT the whole year or a garment check sheet DURING the construction period; reflect the recognition of evaluation as a necessary procedure in planning the next step; include opportunities for the pupils to participate in establishing some evaluation procedures.

—— **Criterion 4: The learning experiences provide practice in the use of common learnings.**

Indications: The learning experiences make mandatory the maintenance of reasonable standards of communication skills in speaking and writing; include written work that is carefully checked for errors in communication skills; capitalize on practical application of mathematics—as increasing or decreasing a recipe, fitting a garment, using measuring spoons and cups, comparing costs of different utensils or detergents, income management, etc.

—— **Criterion 5: The learning experiences are appropriate to the RANGE of background and the ability LEVEL of individual pupils.**

Indications: The learning experiences allow for individual differences—as in height, muscular coordination, speed of work, money available for class projects and ability level; encourage accelerated pupils to do especially significant tasks; are based on known home situations; show that personal background gained through home visits or parent committees is utilized.

—— **Criterion 6: The learning experiences are geared to the developmental MATURITY LEVEL of the pupils.**

Indications: Learning experiences emphasize to pupils that classroom activities will help them achieve important developmental tasks—at the freshman level, appeal to self-understanding or at the senior level, point to the interest in the future; provide for experiences of different levels of maturity in the several years of homemaking in the school program; show sequence learning in the curriculum levels for all aspects of homemaking experiences—as skills, management, relationships, health, etc.—RATHER THAN REPETITION.

—— **Criterion 7: The learning experiences stimulate creativity and the appreciation of beauty.**

Indications: Learning experiences involve use of department facilities and materials which lend themselves to creative experimentation—as collections of fabrics or leaves, wallpaper samples, flower containers, decorative objects, flexible room arrangements, etc.; include creative bulletin boards, interest centers, displays and projects which are prepared by the pupils; include simple but beautiful craft work illustrations which pupils of the age group may adapt; encourage pupils to experiment with different ways of doing things; provide practice in creativity such as food served with special attention to appearance, preparation of original stories suitable for children of different ages, etc.; show evidence of use of informal balance to experiment in creativity rather than the use of formal balance for emphasis on orderliness alone; exhibit variation among pupils as to the way class and home projects are being conducted.

—— **Criterion 8: The learning experiences are flexible enough to meet the immediate circumstances.**

Indications: The learning experiences capitalize on emergency and unexpected situations; relate classroom activities to the pulse of the school; allow for "rounding-off" opportunities when emotional tone of pupils is intense; use evaluations of pupil progress as a basis for decisions about daily lesson plans; permit the teacher and the pupils to plan together for modifications in plans; include time for interruptions so that the most important learnings are not neglected; use pupil mistakes as learning situations; permit pupils to carry out their weak or wrong decisions when desirable; encourage pupils to make adjustments for wrong decisions rather than covering up for them.

—— **Criterion 9: The learning experiences develop and improve each pupil's study and work habits.**

Indications: The learning experiences are such that emphasis is placed on the understanding, interpretation and application of what is learned; help teacher and pupils identify poor study habits through tests or behavior errors; help pupils learn management techniques which lessen work and save time, energy, health, etc.—as collecting pattern pieces on paper, using toy box for easy storage, clipping vs. biting of threads; make use of supervised study for improving study habits as well as learning specific subject matter; include a minimum of rote memorization; evoke critical thinking which is evident in well organized and interesting reports, clear and interesting descriptions of projects, analysis of labels and their meanings, determination of the accuracy of advertising information, etc.; use study skills as use of library and reference books, developing tables and diagrams, etc.; provide techniques for and experience in problem solving—as analysis of consequences, alternate solutions, etc.

THE HOMEMAKING DEPARTMENT

—— **Criterion 1: The homemaking department has a pleasant, healthful and home-like atmosphere.**

Indications: The homemaking department exhibits neat and attractive appearance with provision for adequate natural and artificial lighting, ventilation, heat, sanitation, etc.; has decorations and arrangement of equipment and furnishings which show appreciation of art principles in keeping with a school setting; stimulates interest in homemaking. All of department is in use.

—— **Criterion 2: The homemaking department is used to provide a learning experience in home management.**

Indications: The homemaking department is used as a laboratory for experiences in various home activities—as in the care and selection of equipment and furnishings, protection or refinishing of surfaces, artistic arrangement of interest centers, management of time and energy, social activities, etc. (such activities are integrated with other learning experiences rather than being considered as "chores"); represents an acceptable standard of efficiency, housekeeping and beauty for the pupils and the community.

FORM CP

DIRECTIONS: This inventory consists of statements designed to sample opinions about the homemaking teacher's profession. There is some disagreement as to what these attitudes should be, therefore, there are no right or wrong answers. What is desired is your own individual feeling about the statements. Read each statement and decide how YOU feel about it. Then darken the space on the answer sheet using the following code:

1 to indicate that you strongly agree
2 to indicate that you agree
3 to indicate that you are undecided or uncertain
4 to indicate that you disagree
5 to indicate that you strongly disagree

Think in terms of the overall homemaking teaching profession rather than any specific job. There may be some instances in which your first response will be "it depends on the situation," but consider the statement as you would usually feel. There is no time limit, but work as rapidly as you can.

1. Administrators are usually interested in improving the homemaking department.
2. It is a practical educational experience for homemaking students to prepare a banquet for school functions.
3. There is generally an unsympathetic attitude toward homemaking on the part of teachers in the school.
4. Homemaking is the most important subject a girl can take in high school.
5. The school administrators should help the homemaking teacher plan the program.
6. Homemaking classes are usually too large for the amount of equipment provided.
7. Most other teachers feel that homemaking is a waste of time for boys.
8. Many other teachers resent the conference period provided in the homemaking teacher's program.
9. Homemaking students should never sew costumes for school plays.
10. Homemaking teachers generally have an unfair share of extra-class responsibilities.
11. The homemaking teacher's class schedule is usually light enough to provide adequate time for home visits.
12. The homemaking teacher too often is the seamstress for the school.
13. Most hot lunch programs provide inadequate meals for the pupils.
14. Many other teachers think that homemaking is only cooking and sewing.
15. Faculty meetings are usually a waste of time for the homemaking teacher.
16. High school counselors are unwilling to familiarize themselves with the homemaking program.
17. Other teachers should not expect to use homemaking department facilities.
18. Athletic uniforms should never be repaired by homemaking students.
19. Counselors always place slow learners in homemaking.
20. The homemaking teaching schedule provides time for doing the varied jobs expected of the teacher.
21. Most school administrators resent state supervision of the homemaking program.
22. There is too much overlapping of subject matter in homemaking and health classes.
23. School administrators have helpful suggestions for planning the homemaking program.
24. School exhibits for the homemaking department take too much time for their value.
25. Faculty members enjoy attending homemaking teas and parties.
26. Most school administrators prefer to have teachers work independently without carrying their school problems to them.
27. Other teachers are usually willing to excuse students from their classes for a conference with the homemaking teacher.
28. The homemaking teacher too often is the "coffee maker" for faculty meetings.
29. High school boys should not be allowed to sample foods prepared in homemaking classes.
30. Other teachers should not eat their bag lunches in the homemaking department.
31. The scheduling of homemaking classes is given less consideration than the scheduling of other subjects.
32. The homemaking teacher has to "fight" to receive sufficient funds.
33. The homemaking department facilities should be available to pupils other than those in homemaking.
34. Other teachers resent the homemaking department's separate library.
35. The homemaking teacher's opinion on academic matters is not respected at faculty meetings.
36. Students who are not taking homemaking should not be allowed to use departmental sewing equipment.

37. Most hot lunch cooks are not interested in knowing about nutrition.

38. The English teacher usually does not approve of the homemaking course.

39. The school's fashion magazines should be kept in the homemaking department.

40. High school administrators usually show pride in the homemaking department.

41. The high school counselor is more interested in the vocational than the personal development of the pupils.

42. High school girls should not be permitted to use the homemaking department as a grooming center.

43. High school administrators show more approval for homemaking teachers who cater to their food fancies.

44. High school boys think that the homemaking curriculum consists mainly of cooking.

45. Other classes should not be permitted to borrow supplies from the homemaking department.

46. It is best if the homemaking teacher does not let other school groups start using the homemaking facilities.

47. The homemaking teacher has fewer discipline problems than other teachers.

48. Home room teachers often excuse pupils to go to the homemaking department just to get rid of them.

49. Other teachers don't realize how much equipment the homemaking teacher must look after.

50. The homemaking department should not be used as a social center.

51. Teachers nowadays are too lax about their own ethical standards.

52. Most schools provide adequate equipment for teaching homemaking.

53. Homemaking pupils too frequently want to come to the homemaking department during the noon hour.

54. Class periods are often unnecessarily shortened to schedule school athletic events.

55. Women teachers are easier to work with than men teachers.

56. Most other teachers don't realize how tiring a laboratory class can be.

57. Teachers should always have free noon hours so that they are away from the pupils for a while during the day.

58. Other teachers too often interrupt the homemaking teacher for help during the school day.

59. Other teachers too often expect to take homemaking pupils from class.

60. Teachers in general regard their subject as the only important one in the high school curriculum.

61. The community usually makes a special attempt to find out what takes place in the homemaking department.

62. The home competes with the school for the time of the pupils.

63. Most parents are willing to help their daughters plan and carry out suitable home projects.

64. Most communities offer few possibilities for interesting field trips.

65. Mothers often feel that they have to compete with the homemaking teacher for prestige as a homemaker.

66. Mothers are likely to make the garment for the daughter if you allow the daughter to take home her sewing class project.

67. Homemaking teachers should belong to social as well as service clubs in the community.

68. Some community groups are unwilling to include homemaking teachers in their activities.

69. Community advisory groups are necessary in planning and carrying on the school homemaking program.

70. The homemaking teacher is expected to know the answers to questions of all individuals who phone.

71. The homemaking teacher must be a leader in improving cooperation between school and community.

72. Parents usually are not interested in the school.

73. The homemaking program can and should improve the standard of living in a community.

74. Most communities nowadays do not expect the teacher to take an active role in community life.

75. It is necessary for the homemaking teacher to participate actively in the PTA.

76. The public should have full knowledge of homemaking class activities.

77. The homemaking teacher should not get involved in the political activities of the community.

78. Active participation in community groups really does not help the homemaking teacher in informing the community of her program.

79. The PTA is helpful in securing cooperation with the community.

80. Community groups should not be allowed to use the facilities of the homemaking department.

81. Parents appreciate what the homemaking teacher does for their children.

82. People in communities usually are willing to devote time as speakers or resource persons in homemaking classes.

83. Home visits are a necessary part of an effective homemaking program.

84. Homemaking teachers often cannot pursue much leisure activity because of community demands.

85. The homemaking teacher should be a source of help for mothers in solving problems in their homes.

86. The good, experienced homemaking teacher is better off when she plans her courses alone than when she calls on parents.

87. Local newspapers usually place articles about the homemaking program in an inconspicuous place.

88. Parents often consider home visits an invasion of privacy.

89. The homemaking teacher shouldn't use much of her time answering questions of people who phone.

90. Most parents are not interested in cooperating with existing school policy.

91. Home visits are necessary to make the homemaking teacher aware of the economic levels existing in the community.

92. The homemaking teacher should encourage parents to visit her classes.

93. Most outside groups leave the department in a messy condition if they use it.

94. The adult education program should be a vital part of the homemaking curriculum.

95. People in the community do not see teachers as persons with needs and interests of their own.

96. Parents usually welcome homemaking teachers into their homes.

97. Stores welcome displays provided by the homemaking department.

98. Communities usually provide too little cultural stimulation for teachers.

99. The community provides too few social opportunities for the teacher.

100. Teachers are watched with a critical eye in many communities.

101. The homemaking teacher is often not appreciated for her service to school and community.

102. People often feel that the homemaking teacher is overly critical.

103. It is exceedingly difficult to coordinate home experiences with activities in homemaking classes.

104. Community members should feel free to ask the cooperation of the homemaking department in local affairs.

105. Most parents are not willing to spend time helping to plan the homemaking course.

106. There are generally few available community organizations that are of interest to an unmarried homemaking teacher.

107. Homemaking is generally more popular with pupils and parents than with counselors and administrators.

108. Parents usually are not interested in the home projects of their children.

109. An open house requires too much time in comparison to its value.

110. Adults are chiefly interested in pointing out the inadequacies of the secondary school program.

111. Parent advisory groups are too difficult to organize for the value they give.

112. The homemaking teacher does not have satisfactory status in the community.

113. The homemaking teacher should divide her purchases among all major stores in the community.

114. Stores are usually willing to supply teaching aids for the homemaking department.

115. Communities are not sufficiently concerned about the out-of-school activities of their adolescents.

116. Parents expect the school to do a discipline job that they are unable to do.

117. Homemaking teachers have a responsibility to speak before community groups.

118. People often are overly critical of the homemaking teacher's manner of dress.

119. The community should accept more responsibility for the recreation of its young people.

120. Parents are not generally interested in adult education opportunities.

121. Adult education activities take too much of the teacher's time.

122. Parents usually study their child's report card carefully.

123. Parents come to an open house out of curiosity rather than to evaluate the work being done.

124. Parents are generally happy to work with the homemaking teacher in an evaluation of their child's progress.

125. The community does not pay too much attention to the school as long as it is doing an acceptable job.

126. Mothers resent having the homemaking teacher show their child a home procedure that is different from the one that the mother uses.

127. Parents feel that they must compete with the teachers for prestige with their children.

128. Mothers usually send inferior fabrics to school for the girls to use for their clothing projects.

129. The community thinks that home economics is only cooking and sewing.

130. Too many people in the community object to teachers doing things which are generally accepted when done by other citizens.

131. Parents come to the homemaking teacher only when their child has a problem.

132. The homemaking teacher should provide opportunities to talk with parents.

133. The homemaking curriculum should be based on the real problems of the local community.

134. Parents should have opportunities to help decide what is included in the homemaking program.

135. Parents like to come to school to find something for criticizing the job of the teacher.

136. Parents do not take the responsibility for their own children.

137. The homemaking teacher must participate actively in home and community betterment.

138. Many mothers do not accept new ideas their children learn in homemaking.

139. Parents have few practical suggestions for improving the homemaking program.

140. Parents get a real sense of pride in seeing their child's project exhibited at an open house.

141. FHA chapters help to stimulate community interest in the homemaking program.

142. Most parents are not interested in attending an open house.

143. There are usually many local citizens who have something to contribute to homemaking classes.

144. Every homemaking teacher should arrange for an advisory committee for the homemaking program if one is not already established.

145. Parents often find that homemaking class activities are not practical.

146. People think that a homemaking foods class includes only such foods as fudge, cake, cookies, etc.

147. Parents are more likely to know what is wrong with the homemaking program than they are to know what should be included.

148. Parents are reluctant to spend the extra money required for sewing projects.

149. Mothers appreciate the information on new techniques in homemaking that their daughters bring home from class.

150. Parent visits during school hours often disrupt the classroom.

151. Homemaking does not have a strong appeal to college preparatory pupils.

152. A state vocational homemaking curriculum guide usually represents the thinking of the best homemaking teachers in the state.

153. The high school home economics curriculum does not provide sufficient intellectual challenge for the homemaking teacher.

154. Home economists are often defensive about the practicality of their major.

155. There is too much competition between homemaking teachers and extension workers in adult education.

156. The feminine character of home economics has allowed for closer unity among professional members.

157. It is important for homemaking departments to be indicative of several economic levels of the community.

158. Homemaking teachers are expected to know everything.

159. Homemaking teachers are generally required to attend too many meetings.

160. The homemaking teacher usually tries to do too much.

161. Homemaking teachers are one of the best groups for encouraging pupils to enter home economics as a profession.

162. Most of the vocational reports are just part of the governmental red tape.

163. Most state supervisors offer too little assistance to the homemaking teacher.

164. The state supervisors often dominate the state home economics association meetings.

165. Homemaking teachers are often too dogmatic.

166. It is easy to get a good job if one has a major in home economics education.

167. It is a privilege to be a homemaking teacher.

168. Too many of today's teen-agers have little interest in learning homemaking skills.

169. The extra employment provided in most homemaking teaching positions is desirable.

170. Homemaking teachers must have a general interest in all subject matter areas of home economics.

171. Sewing is becoming more of a hobby experience than an economic necessity in most American communities.

172. The homemaking teacher has no privacy at school.

173. Professional home economics meetings usually offer stimulating programs.

174. Most home economists are professional minded to an extreme.

175. Vocational requirements help to maintain high standards in homemaking teaching.

176. Most of the supervision from the state vocational department is very helpful.

177. Homemaking teachers too often have trouble getting their jobs organized.

178. The homemaking teacher usually has to work unduly hard to keep the FHA chapter alive.

179. Homemaking teachers should be required to return periodically for additional college courses.

180. Homemaking teachers must be ready to give freely of themselves and their time to their profession.

181. Teaching no longer imposes restrictions on most teachers' private lives.

182. Parents usually take little responsibility nowadays for teaching home skills to their children.

183. Every boy should have some instruction in homemaking.

184. There is too much overlap between the instruction of high school home economics and 4-H in small communities.

185. Homemaking teachers are generally stereotyped in their artistic tastes—bitter-sweet bouquets, grey pottery, etc.

186. Teaching is often monotonous.

187. Vocational homemaking reports take too much time.

188. The homemaking curriculum consisting of cooking and sewing is more appealing to girls than one containing many other units.

189. Homemaking teachers need a separate teacher's code of ethics.

190. Most state supervisors of home economics hold too much authority over homemaking teachers.

191. The thinking of the state supervisors often is removed too far from the real high school classroom situation.

192. All homemaking pupils should belong to FHA.

193. FHA is just another burden for the homemaking teacher.

194. Teachers are second-class citizens in most communities.

195. Women teachers do not like to admit that they are teachers.

196. Homemaking has a natural appeal to girls.

197. The major appeal of home economics is usually through science.

198. FHA is a necessary part of the homemaking curriculum.

199. Homemaking teachers are among the most attractively dressed people of their schools.

200. One of the weaknesses of the home economics profession is the scarcity of men in the field.

201. Most home economists do little reading outside of their own field.

202. The extended employment required of vocational homemaking teachers leaves insufficient time for summer study and recreation.

203. Women teachers are generally more conscientious about their jobs than are men teachers.

204. The term "homemaking" tends to decrease the status of home economics at the high school level.

205. Homemaking teachers should encourage some of their pupils to enter home economics.

206. The state supervisors of home economics are usually strong home economics leaders in the state.

207. Vocational homemaking programs are superior to non-vocational programs.

208. A good teacher should be able to include all the subject matter in the homemaking classes so that a home economics club would not be necessary.

209. Homemaking teachers are requested too often to participate in research projects.

210. The state vocational homemaking department is usually very democratic.

211. The leaders in the home economics profession are generally "eager-beavers."

212. State supervisors visit the schools primarily to see that they are carrying out state policies.

213. The job of teaching in high school does not offer much opportunity to associate with stimulating people.

214. Colleges usually give inadequate preparation for the job of teaching.

215. The major appeal of home economics is usually through the artistic emphasis.

216. Most homemaking teachers have too much equipment to look after.

217. Foods and clothing classes usually have the greatest appeal to teen-agers.

218. Many homemaking classes have become the "dumping ground" for students of low ability.

219. The findings in home economics research seldom assist the homemaking teacher in their job.

220. Homemaking classes are frequently too large to be efficient.

221. High school superintendents often resent the requirements imposed by the state vocational program.

222. All homemaking teachers should take advanced college courses.

223. Teaching is one of life's greatest callings.

224. Homemaking teachers are too quick to accept new fads and short cuts in homemaking.

225. Most homemaking teachers have to work too hard in the community.

226. Today's parents are unprepared to teach homemaking skills to their children.

227. Pupils of low ability can profit much from homemaking classes.

228. Parents generally feel uncomfortable when entertaining the homemaking teacher in their home.

229. Homemaking departments should be an example of the highest economic level of the community so as to inspire pupils to a better way of life.

230. Many of our effective homemaking teachers are lost from the profession to extension.

231. The homemaking curriculum has accepted the responsibility for some phases that rightly belong to other subjects—as art, social studies, health, etc.

232. Every homemaking teacher should be an expert cook.

233. Homemaking teachers are required to join too many professional organizations.

234. Women who prefer not to compete with men go into home economics.

235. The homemaking teacher's job is not a very glamorous one.

236. Most jobs as homemaking teacher provide a lot of personal security.

237. The standards of home economics have been lowered by the acceptance of short cuts.

238. Every homemaking teacher should be an expert seamstress.

239. The greatest appeal of homemaking is its practical application to the immediate needs of the pupils.

240. Most popular home magazines contain valuable home economics instruction.

DIRECTIONS: Following is a list of statements that represent certain attitudes of adults. Obviously, there are no right or wrong answers. How do you feel about the attitudes? Do you feel these statements are true? If so, darken the "T" column on the answer sheet. If you do not feel that the statement is true, darken the "F" column on the answer sheet.

DO NOT OMIT ANY ITEM

241. Mothers from the low economic level will not attend adult classes.

242. Children should not be allowed to engage in noisy activities in the house.

243. Parents should be more concerned that their children are happy than that they are well-behaved.

244. Children should be allowed privacy and "secrets" from the parents.

245. Children need the experience in taking their toys apart to see how they "work."

246. Parents should be strict with their children.

247. The greatest contribution of a mother is to keep her family clean and healthy.

248. Parents should encourage their children to seek new adventures outside of the home.

249. The closeness of family relationships makes conflicts inevitable.

250. The children should be taught to obey and respect adults.

251. A mother should place her child's interest above anything else.

252. The mother should accept most of the responsibility for the training of the children.

253. Low economic families let their children grow wild without attempting to train them.

254. Competition within a family is desirable.

255. Parents should seek to free their children from parental authority.

How do you feel about these attitudes? Are they true or false as applied to you?

256. I wish I could be as happy as others seem to be.

257. I have often had to take orders from someone who did not know as much as I did.

258. These days I find it hard not to give up hope of amounting to something.

259. It takes a lot of argument to convince most of the people the truth.

260. I do many things which I regret afterwards (I regret things more or more often than others seem to).

261. I find it hard to make talk when I meet new people.

262. My speech is the same as always (not faster or slower, or slurring; no hoarseness.)

263. Most people will use somewhat unfair means to gain profit or an advantage rather than lose it.

264. It makes me impatient to have people ask my advice or otherwise interrupt me when I am working on something important.

265. I cry easily.

266. I very seldom have spells of the blues.

267. I am always disgusted with the law when a criminal is freed through the arguments of a smart lawyer.

268. My way of doing things is apt to be misunderstood by others.

269. I can be friendly with people who do things which I consider wrong.

270. I have several times given up doing a thing because I thought too little of my ability.

271. I am likely not to speak to people until they speak to me.

272. I have several times had a change of heart about my life work.

273. I have sometimes stayed away from another person because I feared doing or saying something that I might regret afterwards.

274. People often disappoint me.

275. The future is too uncertain for a person to make serious plans.

276. I am not easily angered.

277. People have often misunderstood my intentions when I was trying to put them right and be helpful.

278. It makes me feel like a failure when I hear of the success of someone I know well.

279. I am apt to pass up something I want to do because others feel that I am not going about it in the right way.

280. I find it hard to set aside a task that I have undertaken, even for a short time.

281. Sexual things disgust me.

282. I have frequently worked under people who seem to have things arranged so that they get credit for good work but are able to pass off mistakes onto those under them.

283. I sometimes find it hard to stick up for my rights because I am so reserved.

284. I never attend a sexy show if I can avoid it.

285. I would certainly enjoy beating a crook at his own game.

HOMEMAKING
TEACHER
ATTITUDE
INVENTORY

FORM 55

UNIVERSITY OF MINNESOTA
COLLEGE OF EDUCATION
SCHOOL OF HOME ECONOMICS
BUREAU OF EDUCATIONAL RESEARCH

Following are groups of activities engaged in by many home economists. Which of these activities would you most like to do and which of these activities would you least like to do? Except by personal preference, no one activity is more or less desirable than any of the other activities. Make your selections indicating your feeling rather than any hunch you might have concerning "acceptable" activities for home economists. The latter approach would provide only a stereotype of home economists' interests rather than a true picture of your interests.

From each group of four statements select the one activity that you would like MOST to do and place an X on the letter of the activity in the column of the answer sheet labeled "most". Select the one activity that you would LEAST like to do and place an X on the letter of the activity in the column of the answer sheet labeled "least". Your choice should depend on what you like to do not on what you are best able or can afford to do.

DO NOT OMIT ANY ITEM.

DO NOT MAKE ANY MARKS ON THIS BOOKLET

1. A. Fix breakfast.
   B. Chat with your apartment mate over a cup of coffee.
   C. Select the outfit to wear that day.
   D. Plan the day's schedule.

2. A. Pour at a silver tea.
   B. Select a silverware pattern.
   C. Polish your silverware.
   D. Plan your silverware needs.

3. A. Plan a series of adult classes.
   B. Design fly sheet to be used as publicity for adult class series.
   C. Mimeograph fly sheet used as publicity for adult class series.
   D. Serve as chairman of adult class series.

4. A. Purchase a new kitchen gadget.
   B. Purchase a new classical record.
   C. Purchase a new conversation piece for your end table.
   D. Purchase a cookbook.

5. A. Clean the bathroom.
   B. Buy and put away the groceries.
   C. Practice a music lesson.
   D. Solicit money for the Community Chest.

6. A. Serve as hostess for a party.
   B. Prepare a meal for a party.
   C. Arrange flowers for a party.
   D. Plan the menu for a party.

7. A. Read the recipe page in the newspaper.
   B. Read the social page in the newspaper.
   C. Read the art institute activities in the newspaper.
   D. Read the super market ads in the newspaper.

8. A. Purchase a gourmet magazine.
   B. Purchase a fashion magazine.
   C. Purchase a news magazine.
   D. Purchase a consumer magazine.

9. A. Design publicity material for Family Service Drive.
   B. Collect money for Family Service Drive.
   C. Count money collected for Family Service Drive.
   D. Serve on planning committee for Family Service Drive.

10. A. Decorate speakers platform at state convention.
    B. Introduce the speaker.
    C. Collect information sheets at the door of the convention assembly.
    D. Organize information sheets from convention members as to interest groups.

11. A. Select music for a concert.
    B. Play in concert.
    C. Collect tickets at door to concert hall.
    D. Accompany friend to concert.

12. A. Plan the Thanksgiving dinner.
    B. Make the pumpkin pies.
    C. Set the table for the Thanksgiving dinner.
    D. Entertain the guests at the Thanksgiving party.

13. A. Refinish a table.
    B. Attend a wedding reception.
    C. Visit the art gallery.
    D. Reorganize a kitchen for greater efficiency.

14. A. Demonstrate the use of the family budget.
    B. Demonstrate how to make introductions.
    C. Demonstrate how to make an attractive bulletin board.
    D. Demonstrate how to mark and sew darts.

15. A. Try to inspire a group of student teachers.
    B. Explain your plan for the care of the department to student teachers.
    C. Demonstrate the technique for measuring hemlines to student teachers.
    D. Demonstrate the principles of an effective exhibit to student teachers.

PLEASE TURN TO PAGE 2

16. A. Decorate hat boxes.
B. Make a hanger cover.
C. Set up example of an efficiently arranged closet.
D. Interview families as to closet needs.

17. A. Teach a class in clothing construction.
B. Teach a class in personal relationships.
C. Teach a class on color selection.
D. Teach a class on money management.

18. A. Go on a home visit.
B. Prepare a display for the parents.
C. Show the mothers some time saving technique in the kitchen.
D. Bake cookies for a parent party.

19. A. Make curtains for a new apartment.
B. Arrange the kitchen cupboards in a new apartment.
C. Plan the color scheme for a new apartment.
D. Hold an "open house" for friends in a new apartment.

20. A. Lead a discussion for a study group.
B. Arrange the table decorations for the study group tables.
C. Make the refreshments for the study groups.
D. Plan for the best table arrangements for effective discussions.

21. A. Plan a flower garden that is within a middle income budget.
B. Plant flowers in your garden.
C. Carry flowers to your friends.
D. Arrange flower display for a flower shop.

22. A. Read a book on art history.
B. Mount postcards in your collection albums.
C. Show colored slides to your friends.
D. Organize your picture collections into similar groupings.

23. A. Be hostess chairman for PTA meeting.
B. Mimeograph programs for PTA meeting.
C. Prepare budget report for PTA meeting.
D. Prepare exhibit for PTA meeting.

24. A. Attend a premier of a great play.
B. Hostess at the governor's reception.
C. Plan a wardrobe for a European trip.
D. Make a luxurious negligee.

25. A. Attend a lecture on modern art.
B. Serve punch to the discussion group.
C. Plan for the rotation of position as discussion leader.
D. Join a discussion group on modern art.

26. A. Knit a sweater.
B. Model your finished sweater for your friends.
C. Select a sweater pattern.
D. Analyze your wardrobe to determine the type of sweater needed.

27. A. Assist club by selecting art prints and musical recordings for children's home.
B. Assist club by rolling bandages for the Red Cross.
C. Assist club by visiting elderly people in an old people's home.
D. Assist club by preparing food baskets for needy families.

28. A. Plan 5-year budget report to submit to school board.
B. Type 5-year budget plan.
C. Appear before school board to present budget.
D. Plan re-decoration of home economics department.

29. A. Write Children's stories.
B. Entertain an author in your home.
C. Bake a cake for an author friend.
D. Assist the author in organizing the index for his book.

30. A. Weave a rug.
B. Plan the design for the rug.
C. Exhibit the rug at the county fair.
D. Compare the value of your hand made rug with a commercial rug.

31. A. Plan the interior decoration for the house.
B. Plan the entertaining areas of the house.
C. Plan the storage areas of the house.
D. Draw the house plan.

32. A. Press a pair of trousers.
B. Select accessories for a brown suit.
C. Demonstrate the care of trousers to a boy's club.
D. Serve on a panel with a group of boys.

33. A. Have lunch with a business executive.
B. Have lunch with a well-known artist.
C. Have lunch with a famous chef.
D. Have lunch with a leading socialite.

34. A. Prepare a low-calorie dinner.
B. Interest others in a weight reduction club.
C. Demonstrate the use of color in low calorie foods.
D. Plan a menu pattern for low calorie diets.

35. A. Make out market order for class.
B. Establish business connection with a grocery store.
C. Wash the fruits and vegetables.
D. Arrange a fruit bowl.

36. A. Make a package of cookies for the superintendent.
B. Select the superintendent's Christmas gift.
C. Wrap the superintendent's Christmas gift.
D. Present the faculty Christmas gift to the superintendent.

37. A. Prepare the evening meal.
B. Plan the evening meal.
C. Read the evening newspaper.
D. Chat with a friend on the phone.

38. A. Accompany adult class to a furniture exhibit.
B. Arrange a furniture display.
C. Select furniture for the homemaking department.
D. Refinish a simple piece of furniture.

39. A. Select a strand of pearls for a friend.
B. Make a piece of jewelry.
C. Polish a pair of earrings with silver polish.
D. Loan a piece of jewelry to your sister.

PLEASE TURN TO PAGE 1 (INNER PAGE 1)

40. A. Plan the tour routine for the school open house.
B. Make the punch for the school open house.
C. Introduce parents at the school open house.
D. Arrange a home economics exhibit for the school open house.

41. A. Model shoes.
B. Glue sequins and pearls on a pair of evening sandals.
C. Make a shoe bag.
D. Organize shoe storage.

42. A. Hostess at a Christmas party.
B. Wrap Christmas cookies as presents.
C. Make felt Christmas stockings.
D. Assist a younger person with a Christmas budget.

43. A. Plan the food preparation procedure for a large party in a home with limited kitchen space.
B. Be guest of honor at a formal party.
C. Make net skirt to wear at a formal dinner party.
D. Arrange hors d'oeuvres tray for formal party.

44. A. Wash the dishes.
B. Paint a canister set.
C. Organize the kitchen drawers.
D. Discuss kitchen care at your sewing circle.

45. A. Wash a frilly nylon dress for child.
B. Take a child for a leisurely walk.
C. Help a child set up shelf space for his toys.
D. Paint picture with children.

46. A. Plan the care routine for beautiful house plants.
B. Join the garden club discussion group.
C. Water the house plants.
D. Fix unusual plant arrangements in planters.

47. A. Cook eggs.
B. Decorate Easter eggs.
C. Plan an Easter egg hunt.
D. Invite children to an Easter egg hunt.

48. A. Set the table.
B. Embroidery a table cloth.
C. Purchase new table linen.
D. Be responsible for the table conversation.

49. A. Plan the household budget for a new house.
B. Arrange the furniture in a new house.
C. Conduct tours through a new house.
D. Hang draperies in a new house.

50. A. Contact extension leader for her cooperation on a program.
B. Organize a cooperative program with extension leader.
C. Pick up teaching aids to be used on the program.
D. Select the records for the musical background during the program.

51. A. Assist the FHA decorations committee.
B. Assist the FHA budget committee.
C. Assist the FHA hostess committee.
D. Assist the FHA registration committee.

52. A. Make dresses for exclusive patrons.
B. Sell dresses at an exclusive shop.
C. Buy dresses for an exclusive shop.
D. Design dresses for an exclusive shop.

53. A. Play bridge.
B. Serve lunch at the bridge party.
C. Select bridge prizes.
D. Decorate the bridge tables.

54. A. Prepare food for a picnic.
B. Organize plans for picnic.
C. Gather flowers in the woods for the picnic table.
D. Direct games at the picnic.

55. A. Press a dress for a trip.
B. Pick up the plane ticket.
C. Pack the overnight bag.
D. Choose accessories for the dress you are going to wear on the trip.

56. A. Buy antique chair.
B. Refinish antique chair.
C. Exhibit chair at antique show.
D. Plan a room around antiques.

57. A. Arrange attractive relish trays.
B. Defrost the refrigerator.
C. Plan for best use of a small refrigerator.
D. Answer questions of a ladies' club on use of refrigerator.

58. A. Straighten up living room after the guests leave.
B. Pick up the guests in your car.
C. Arrange the flowers and music for a dinner party.
D. Organize meal plans so there will be very little last minute preparation.

59. A. Select and arrange for showing an education film at home economics meeting.
B. Phone members to remind them of home economics meeting.
C. Prepare cupcakes for the refreshments at the home economics meeting.
D. Select and read a poem at the home economics meeting.

60. A. Wash your face.
B. Apply make-up for a special occasion.
C. Determine the best buys in make-up preparations.
D. Introduce your friends to new make-up techniques.

61. A. Visit with invalid grandmother.
B. Arrange bouquets for invalid grandmother.
C. Make flannel bedjacket for invalid grandmother.
D. Arrange for medical care for invalid grandmother.

62. A. Join a music club.
B. Join a social club.
C. Join an investment club.
D. Join a sewing club.

63. A. Demonstrate special stitches on a sewing machine.
B. Buy a sewing machine.
C. Make a blouse.
D. Use sewing machine to make decorative stitches on a blouse.

64. A. Organize a file on Christmas recipes.
B. Make Christmas bread.
C. Decorate Christmas breads.
D. Hostess a Christmas brunch.

65. A. Write a newspaper article on making your home creative.
B. Write a newspaper article on setting a table properly.
C. Write a newspaper article on procedures for saving time and energy.
D. Write a newspaper article on being a good hostess.

66. A. Buy sheets.
B. Make a bed.
C. Write a bedtime story.
D. Discuss bed care with Red Cross class.

67. A. Serve on finance committee of the church.
B. Arrange flowers near the church altar.
C. Greet people at the church.
D. Hem dishtowels for the church kitchen.

68. A. Act in the faculty play.
B. Distribute tickets to the faculty play.
C. Manage all props for the faculty play.
D. Make long skirt for an actress in the faculty play.

69. A. Arrange bricks for the bookcase.
B. Select boards for a bookcase.
C. Use an electric sander on the boards for the bookcase.
D. Show bookcase to friend who is just moving into a new apartment.

70. A. Organize snack kitchen in teacher's room.
B. Spray paint a table for the teacher's room.
C. Select pictures for teacher's room.
D. Ask individual teachers to take certain responsibilities for the room.

71. A. Decorate a chest with Peter Hunt designs.
B. Organize contents of chest drawers.
C. Dust the chest.
D. Show your friends your handiwork.

72. A. Plan a backyard barbeque party.
B. Barbeque the chicken on the outdoor spit for the party.
C. Decorate the serving trays for the barbeque party.
D. Greet the guests at the barbeque party.

73. A. Work with agriculture teacher on an exchange plan.
B. Teach kitchen time management lesson to agriculture class.
C. Teach agriculture class how to sew on buttons.
D. Teach color lesson to agriculture class.

74. A. Add details of eyes, ears, tail, etc. on stuffed animals.
B. Distribute stuffed animals in old people's home.
C. Cut out pieces of fabric for stuffed animals.
D. Purchase materials for making stuffed animals.

75. A. Plan a menu pattern for elementary children.
B. Prepare nutritious foods as midday snack for elementary class.
C. Promote a nutrition program among the elementary school teachers.
D. Prepare a bulletin board in the elementary school cafeteria.

76. A. Compare cost of home and commercial buttonholes.
B. Make machine buttonholes.
C. Plan buttonhole design as the decoration on a blouse front.
D. "Buttonhole" teachers for a faculty committee.

77. A. Lead a discussion on "Safety with Electrical Cords" at a Brownie meeting.
B. Design a lamp shade.
C. Select a lamp shade for a reading lamp.
D. Cover a lamp shade.

78. A. Make a straight skirt.
B. Plan a sport wardrobe.
C. Tool a leather belt.
D. Join a committee on "Sport Fashions".

79. A. Manage my home.
B. Vacuum my home.
C. Redecorate my home.
D. Serve coffee in my home.

80. A. Tell your friends how to make a new salad.
B. Make a tossed salad.
C. Make a French salad dressing.
D. Buy fresh vegetables.

81. A. Promote a campaign for community recreation for youth.
B. Devise ideas for campaign posters and slogans.
C. Serve as financial chairman for the campaign.
D. Address envelopes in which to send publicity material.

82. A. Make house dress.
B. Choose gay fabric for house dress.
C. Select practical pattern for house dress.
D. Wear house dress to "come-as-you-are" party.

83. A. Visit "shut-ins" in your neighborhood.
B. Assist your neighbor with her room arrangement.
C. Help your neighbor set out strawberry plants.
D. Assist your neighbor with her food budget.

PLEASE TURN TO PAGE 5

84. A. Shampoo your hair.
B. Determine whether to have a professional or home permanent.
C. Experiment with new "hair do's".
D. Encourage friend to try a new hair style.

85. A. Serve as master of ceremonies on the TV program.
B. Plan the TV program.
C. Prepare food for the tea table that will be used on the TV program.
D. Set up a tea table for the TV program.

86. A. Glaze ceramic plates.
B. Set the table.
C. Loan a set of plates to a close friend.
D. Buy a set of dishes.

87. A. Wash dishes.
B. File recipes.
C. Give a talk to the ladies' club.
D. Select paint for the back porch.

88. A. Write invitations to the birthday party.
B. Plan the games for the birthday party.
C. Have charge of the games at the birthday party.
D. Decorate individual cakes for the birthday party.

89. A. Plan for the storage of autumn displays.
B. Press autumn leaves.
C. Arrange autumn bouquets.
D. Gather autumn leaves with your friends.

90. A. Prepare the bedroom for a special guest.
B. Choose new lamps for the bedroom.
C. Organize the dresser drawers.
D. Make the bed.

91. A. Shorten a skirt.
B. Design a dress for yourself.
C. Describe dresses at a style show.
D. Plan your clothing wardrobe.

92. A. Meet a plane to pick up a visiting home economist.
B. Take the visiting home economist to the art institute.
C. Plan schedule of activities for visiting home economist.
D. Prepare lunch for the visiting home economist.

93. A. Supervise the stage arrangements for the school operetta.
B. Supervise purchase of fabric for operetta aprons.
C. Draft pattern for operetta aprons.
D. Pass out programs at the school operetta.

94. A. Serve on planning committee for open house.
B. Make the punch for the school open house.
C. Introduce parents at the school open house.
D. Arrange a home economics exhibit for the school open house.

HAVE YOU ANSWERED PAGES 3 AND 4?

95. A. Visit with invalid grandmother.
B. Arrange bouquets for invalid grandmother.
C. Make flannel bedjacket for invalid grandmother.
D. Arrange room for convenient bedside care of invalid grandmother.

96. A. Design hat box covers.
B. Make a hanger cover.
C. Set up example of an efficiently arranged closet.
D. Interview families as to closet needs.

97. A. Assist the FHA decorations committee.
B. Assist the FHA budget committee.
C. Assist the FHA hostess committee.
D. Assist the FHA historian.

98. A. Read the recipe page in the newspaper.
B. Read the social page in the newspaper.
C. Read a newspaper review of a pottery exhibit.
D. Read the super market ads in the newspaper.

99. A. Buy sheets.
B. Make a bed.
C. Select bedspread.
D. Discuss bed care with Red Cross class.

100. A. Do last minute dusting before the guests arrive.
B. Pick up the guest in your car.
C. Arrange the flowers and music for a dinner party.
D. Organize meal plans so that the dinner party will be inexpensive.

101. A. Prepare your own lunch.
B. Go to a bridge luncheon.
C. Lunch with your music club.
D. Plan use of deep freeze for quick lunches.

102. A. Attend a meeting of planning committee for the church open-house.
B. Arrange flowers near the church altar
C. Greet people at the church.
D. Hem dishtowels for the church kitchen.

103. A. Read a magazine article on household hints.
B. Read a magazine article on primitive art.
C. Read a magazine article on the interests of children.
D. Read a magazine article on types of new sewing machines.

104. A. Organize snack kitchen in teacher's room.
B. Spray paint a table for the teacher's room.
C. Select curtains for teacher's room.
D. Ask individual teachers to take certain responsibilities for the room.

105. A. Compare cost of home and commercial buttonholes.
B. Make machine buttonholes.
C. Plan buttonhole design for a sleeve cuff.
D. "Buttonhole" teacher for a faculty committee chairman.

PLEASE TURN OVER TO PAGE 6

106. A. Work with agriculture teacher on an exchange plan.
B. Teach "care of clothes" lesson to agriculture class.
C. Teach agriculture class how to sew on buttons.
D. Teach color lesson to agriculture class.

107. A. Clean the bathroom.
B. Make out weekly grocery order.
C. Practice a music lesson.
D. Hostess at PTA.

108. A. Purchase a gourmet magazine.
B. Purchase a fashion magazine.
C. Purchase a news magazine.
D. Purchase a cost comparison magazine.

109. A. Plan the interior decoration for the house.
B. Plan the entertainment needs for the house.
C. Plan the storage areas of the house.
D. Draw the house plan.

110. A. Prepare clever invitations to the faculty picnic.
B. Publicize the faculty picnic.
C. Purchase the supplies for the faculty picnic.
D. Serve on food committee for faculty picnic.

111. A. Pour at a silver tea.
B. Select a silverware pattern.
C. Wrap the silverware for storage.
D. Plan your silverware needs.

112. A. Organize hostesses for the art exhibit.
B. Hostess at the art exhibit.
C. Set up chairs for art exhibit.
D. Arrange art works for the exhibit.

113. A. Select music for a concert.
B. Play in concert.
C. Usher at concert hall.
D. Accompany friend to concert.

114. A. Plan 5-year budget report to submit to school board.
B. Type 5-year budget plan.
C. Appear before school board to appeal budget.
D. Plan re-decoration of home economics department.

115. A. Demonstrate the use of closet accessories.
B. Demonstrate how to make introductions.
C. Demonstrate how to make an attractive bulletin board.
D. Demonstrate how to put in zippers.

116. A. Attend a chamber music concert.
B. Hostess at the governor's reception.
C. Plan a wardrobe for an European trip.
D. Make a bridesmaid's dress.

117. A. Attend a lecture on modern art.
B. Serve a luncheon to the discussion group.
C. Plan for the rotation of position as discussion leader.
D. Join a discussion group on modern art.

118. A. Demonstrate muffin variations to class.
B. Teach a class in personal relationships.
C. Teach a class on color selection.
D. Teach a lesson on selection of canned foods.

119. A. Have lunch with a business executive
B. Have lunch with a well-known artist.
C. Have lunch with a utility company demonstrator.
D. Have lunch with a society editor.

120. A. Make out market order for class.
B. Establish business connection with a grocery store.
C. Wash the fruits and vegetables.
D. Arrange a harvest table decoration.

121. A. Plan school lunch menus for a week.
B. Entertain school board members at lunch in school lunch room.
C. Test a recipe for the school lunch.
D. Plan new color scheme for the school lunch room.

122. A. Make peanut butter sandwiches for a child.
B. Take a child out to dinner.
C. Help a child set up shelf space for his toys.
D. Paint pictures with children.

123. A. Organize the kitchen in a new house.
B. Select pictures for a new house.
C. Conduct tours through a new house.
D. Hang draperies in a new house.

124. A. Prepare food for a picnic.
B. Organize plans for picnic.
C. Gather flowers in the woods for the picnic table.
D. Invite people to the picnic.

125. A. Interest others in forming a weaving class.
B. Purchase yarns for weaving class.
C. Set up room for weaving class.
D. Plan design for woven place mats.

126. A. Press a shirt for a trip.
B. Pick up the plane ticket.
C. Pack the overnight bag.
D. Decorate a hat you are going to wear on the trip.

127. A. Make change at the Women's Club bake sale.
B. Make a pie for the bake sale.
C. Sell pies at the bake sale.
D. Demonstrate tart decorations at bake sale.

128. A. Join a craft club.
B. Join a social club.
C. Join an investment club.
D. Join a sewing club.

129. A. Set up display of individual salads.
B. Mix tray of ice cream.
C. Plan for best use of a small refrigerator.
D. Answer questions of a ladies' club on use of refrigerator.

DO NOT OMIT ANY ITEMS

Problem: Mary is a new girl in your class. She has long, stringy hair and wears stripes with plaids. She is not very attractive and she easily finds fault with the school. No one seems to pay any attention to her.

______1. What would be your feeling about Mary?

1. I would feel sorry for her.
2. She doesn't care about the way she looks.
3. I would be friendly to her but not want to become a friend.
4. It might help her if I would be friendly to her.
5. We might be able to help her build interest in the school and social life.

______2. How would you feel if you were Mary?

1. Sorry for myself.
2. I have many adjustments to make before I can fit into the group.
3. No one likes me so what does it matter what I do.
4. I will have to work very hard to be accepted.
5. I am just as good as anyone else.

Problem: Your mother has prepared a casserole using liver for the family's evening meal. She prepared this casserole because she read an article that explained that liver was a very nutritious food. You and your brother do not like liver.

______3. What would you do?

1. Explain to my mother that I didn't like liver.
2. I would eat a small serving of it.
3. Taste it, if I didn't like it I wouldn't eat it.
4. Leave the pieces of liver and eat the rest.
5. I'd try to eat anything.

______4. What would you do if you were the mother?

1. Encourage them to try it.
2. Fix it so that no one could tell it was liver.
3. Plan meals everyone enjoys.
4. Explain that people can learn to like new foods.
5. Try to convince them that it is good for them.

Problem: You are going to have a gang of your friends over for a party. You have been invited to several other parties so that you feel that there are 25 people that you should invite. Since teen-agers usually have such big appetites, this will be an expensive group to feed. Your family lives on a limited budget. Your mother suggests that you have your party begin at 8:00 p.m. and serve only a dessert. All of the rest of the parties have served a full meal.

______5. What would be your feeling toward your mother's suggestion?

1. I'll go along with it even if I don't like it.
2. Perhaps we could serve an unusual dessert.
3. Just a little snack can be as much fun as serving a big dinner.
4. Maybe I can start a new fad for "dessert parties."
5. If this is all we can afford it would be better than nothing.

Problem: Jane is a cute girl and has many pretty clothes for her parents have lots of money. She also has a friendly personality. Jane is president of her class, active in many clubs and very popular. You come from a poor family, have only a few pretty clothes and you are not popular with either the fellows or the girls.

______6. What would be your feeling toward Jane?

1. She may have better clothes but she isn't any better.
2. I'd want her to be my friend.
3. I would be glad that she was fortunate enough to have all these nice things.
4. I'd be jealous but I wouldn't let it show.
5. I would admire her personality.

Problem: Your mother has gained a lot of weight and is very careless about her appearance. You are ashamed of the way she looks. You would like to have her look nice.

______7. What would you do?

1. Help her select becoming clothes.
2. Suggest that she go to a reducing center.
3. Have her join you each evening and do your grooming session together.
4. Tell her to fix herself up.
5. Point out to her another lady who is the same age but much nicer looking.

Problem: You and four of your girl friends have been friends since the 4th grade. You have much in common and have always done everything together. There are other interesting girls in your class but you have fun with your own group and haven't associated with many others. You ran for the office of senior class secretary but did not win.

______8. How would you feel?

1. That it was my own fault.
2. It is important to have as many friends as possible.
3. You only improve yourself through getting to know other new people.
4. I have to make an effort to meet people.
5. Ashamed of myself for not getting to know more people.

______9. What would you do?

1. Try to make friends with others.
2. Try to invite others into my group.
3. I'd be friendly but stay with my old friends.
4. Be a good loser and forget about the whole thing.
5. Join some social organizations and circulate.

Problem: You have been brought up in a home that made church an important part of your life. You and your family have been very active in one particular church. Some of your friends think that church is for old people and laugh at young people who pay so much attention to a God.

______10. How would you feel?

1. They are missing a very major part of their life.
2. Sorry that they have been brought up wrong.
3. They should be going to church themselves.
4. Everyone is entitled to believe what he thinks is right.
5. Sorry for them for being so ignorant.

______11. What would you do?

1. Live my life my way and let them go their own way.
2. Encourage them to come to some church activity with me.
3. Try to be tolerant and help them to understand my feelings.
4. Try to convince my friends that young people need God.
5. Explain to them what my religion is really all about.

Problem: There is a cute boy that you sit by in your math class. He watches you as you enter the classroom but doesn't talk to you when you sit beside him. You think he likes you but you never have a chance to find out.

______12. What would you do?

1. Be patient and wait for him to make the first move.
2. Invite him to one of my group functions.
3. Smile at him.
4. Ask him about the class assignment.
5. Talk to him about a math problem that I don't understand.

______13. What would you like to have him do the next time you sit by him?

1. Ask you for a date.
2. Ask you to go driving with him after school.
3. Begin a conversation.
4. Compliment you on your appearance.
5. Offer to help you with a math problem.

Problem: You have a date with a boy who is rather shy. Much of the evening is spent in silence because the boy does not know how to carry on a conversation.

______14. How would you feel?

1. He should be making some effort too.
2. I failed in finding his interest.
3. Very self-conscious and uncomfortable.
4. Silence does not need to be uncomfortable.
5. Embarrassed because silence is hard to handle.

______15. What would you do?

1. Ask him about school activities.
2. Get him to talking about himself.
3. Keep the conversation going.
4. Try to get him to talk.
5. Talk about things that he is interested in.

Problem: Your father does not approve of smoking, yet all of your girl friends are learning to smoke. You want to feel like one of the gang.

______16. What would you do?

1. Agree with my parents until I am on my own.
2. Not smoke anyway.
3. Whatever I felt was best for me.
4. Try to decide for myself if I liked smoking.
5. Try it and see if it creates any enjoyment and pleasure.

______17. What would you do if you were the mother?

1. Talk to the daughter about thinking for herself.
2. Get the family together for a heart-to-heart talk.
3. Try to convince her not to smoke.
4. Tell her it isn't necessary to smoke to be one of the gang.
5. Nothing—the daughter is old enough to decide now.

Problem: You are tall and thin. Your brother tells you that you look like a "bean pole." You are taller than any of the boys in your class.

______18. How would you feel?

1. There are certain things I can do to camouflage my looks.
2. Proud of my height if I look nice.
3. I might as well make the best of it.
4. Out-of-place and awkward.
5. There are advantages in being tall.

______19. How would you feel if you were one of the boys in the class.

1. Wouldn't date the girl but have her as a friend.
2. Wouldn't care to go with a taller girl.
3. If I liked the girl, it wouldn't make much difference.
4. That others would laugh at me if I took her out.
5. I'd keep my eye on her for later when I am taller.

Problem: Your mother wants you to come directly home after school so that you can help her with the evening meal. The rest of the gang always stops at the drug store or one of the girl's houses for about an hour.

______20. How would you feel?

1. I'd probably gain too much weight by stopping for these get togethers too often.
2. I'll be missing a lot of fun if I don't join the gang.
3. I have a responsibility to help my mother.
4. That I must obey my mother.
5. I wasn't being treated fairly.

______21. What would you do?

1. Work out a schedule for helping my mother.
2. Stay a few minutes but be home by a certain time.
3. Obey my mother.
4. Explain to the gang why you cannot go with them.
5. Stop with the gang once or twice a week.

Problem: You have to share a bedroom with a nine-year-old sister. She is not very neat and she wants to display her collection of butterflies, match covers, etc.

______22. How would you feel?

1. I wouldn't care to share a room with a younger sister.
2. Mad because she can learn to be neat if she wants to.
3. Discouraged but would put up with it.
4. I have to have a room of my own.
5. I should be able to help my sister become interested in keeping things tidy.

______23. What would you do?

1. Make the sister keep the room neat.
2. Divide the room, one-half for each girl.
3. Encourage her to keep her things as neat as possible.
4. Make some rules, fast.
5. Provide a space for her to display her collections.

Problem: The girls in your class are very unhappy with the boys in the class. They say that the boys don't have any manners and embarrass the girls because they don't know how to act.

______24. How would you feel?

1. Like going with boys in the next higher class.
2. Boys take longer to mature and get over the clumsy stage.
3. That the girls shouldn't pay any attention to the boys' manners.
4. The boys aren't grown up yet.
5. Maybe I don't act like a lady either.

______25. What would you do if you went on a date with one of these boys?

1. Print an article in the school paper about good manners for boys.
2. Relax and have fun.
3. Give him a chance to practice his few manners.
4. Tactfully try to teach him some manners.
5. Expect them to be courteous and see what happens.

Problem: You feel quite grown-up now that you are in high school and have a part-time job to earn some money of your own. Your parents still treat you like a child.

______26. How would you feel?

1. I should be able to decide things for myself.
2. Maybe I am acting like a baby.
3. I should take responsibility if I expect to be treated as an adult.
4. They don't realize how grown-up I am.
5. It is just a part of growing up.

______27. What would you do?

1. Act older and abandon childish habits.
2. Continue to act responsible and trustworthy.
3. Prove to them that I'm not a child.
4. Make them see that I am growing up.
5. Explain to my folks the way I feel.

Problem: Adults just do not seem to like you. They usually make you feel that they are trying to put you in your place because they don't trust you.

______28. How would you feel?

1. Adults don't believe in young people.
2. Adults are too quick to criticize young people.
3. That I must have some mannerisms that bother people.
4. That I wanted to prove I was trustworthy.
5. They don't give me a chance.

______29. What would you do?

1. Avoid these adults.
2. Help them to get to know me better.
3. Try to find out what they don't like and why they don't trust me.
4. Go out of my way to impress them as a mature person.
5. Try to make them like me.

Problem: The community that you live in is very small and does not offer much recreation for young people. Unless there is something going on at the school you won't be able to find anything to do in town.

______30. How would you feel?

1. I'm not the only one in this boat.
2. I'd like to get away from home and school sometimes.
3. People have to learn to entertain themselves.
4. The community doesn't care about teen-agers until they get into trouble.
5. I don't like living in a small town.

______31. What would you do?

1. Develop hobbies by myself.
2. Try to get the community to provide some recreation.
3. Have picnics, parties and enjoy the outdoors.
4. Go out of town to have some fun.
5. Get behind a movement to provide some recreation.

Problem: Mary is an average student in high school. Her older sister Jane, however receives mostly A's in her school work. Mary's parents compare her work with Jane's and expect her to do as well.

______32. How would you feel if you were Mary?

1. I have a right to be treated as an individual.
2. My parents are being unfair.
3. No two people are alike and can't be expected to do the same.
4. I am doing the best I can.
5. My parents should realize that everyone cannot receive all A's.

______33. How would you feel if you were Jane?

1. I'm lucky to be so smart in school.
2. Mary and I have different abilities and should not be compared.
3. I should help Mary with her work.
4. I should defend Mary when the matter is discussed.
5. Mary must not be trying in her school work.

Problem: You have learned in homemaking class that having an allowance makes it easier for a girl to budget her money and that it helps her to be a wise spender. You tell your parents about it that night, but they prefer to continue giving you money as you need it.

______34. How would you feel?

1. I would have to listen to them.
2. I could save them money this way.
3. It would be a good experience for me to have an allowance and learn how to plan my spending.
4. My parents don't think I can manage it.
5. My parents will not accept new ideas.

______35. What would you do?

1. Forget about the allowance and spend money as I please.
2. Keep a record of the money I receive and plan my spending that way.
3. Let my parents have their way in the matter.
4. Ask if they would let me try it for a while.
5. Earn money of my own that I could budget.

Problem: Mary and Ann, ages 12 and 13, are expected to help their mother with the work. Ann very often has to do more than her share and feels that Mary "gets by." The girls often argue about who does what duty and who had done the most work.

______36. How would you feel about the matter?

1. The work should be shared evenly.
2. Each girl should do her share without being asked.
3. They should decide between themselves.
4. The girls should be given jobs according to the amount of time they have.
5. Most sisters have this trouble.

______37. What would you suggest to do?

1. Let the two girls volunteer for jobs.
2. Give work according to time and ability.
3. Assign each girl definite chores and check on her.
4. Help the girls make a fair division of the work so that the duties are rotated.
5. Try to divide the duties evenly.

Problem: Your favorite TV program is on at the same time as the sports show which your brother enjoys viewing. Neither of you wants to give in to the other.

______38. How would you feel?

1. I would want to watch my program.
2. My brother has just as much right as I.
3. Each should get a turn to watch his program.
4. I will let my brother have his way this time but next time he has to give in.
5. We should work out a system of sharing the TV set.

______39. What would you do?

1. Shut the television set off.
2. Make him take turns.
3. Work out a plan for sharing the set.
4. Suggest you alternate turns each week or each night.
5. Try to show him that he shouldn't think only of himself.

Problem: Your younger sister uses your cosmetics. This is becoming expensive for you. She is in the 7th grade.

______40. How would you feel?

1. She's too young to use cosmetics.
2. Sisters should not use each others cosmetics.
3. She should ask my permission.
4. She shouldn't be using my cosmetics.
5. Proud that my sister was also interested in improving her appearance.

______41. What would you do?

1. Buy her some cosmetics.
2. Tell my parents about it.
3. Tell her not to use my cosmetics.
4. Explain to her what you expect if she uses them.
5. Talk it over with my sister and arrive at a mutual solution.

Problem: Sue is having trouble with English in school even though she does her assignments. She thinks that she will get a D and she knows her parents will be angry.

______42. How would you feel if you were she?

1. English is hard for me and I need help and encouragement.
2. I shouldn't worry about my grade if I am doing my best.
3. I tried my best and couldn't do any better.
4. Nervous and worried over my grade.
5. I am not doing my best.

Problem: You have studied room arrangement in your home economics classes. You go home and rearrange the living room furniture. Your father is quite disturbed over the change.

______43. How would you feel?

1. My father has different ideas about room arrangement than I do.
2. My father doesn't understand good room arrangement.
3. My father doesn't appreciate my efforts.
4. Men are disturbed by most any change.
5. I should have talked it over with other family members before making the change.

______44. What would you do?

1. Change it back if it displeased my father a great deal.
2. Ask my father to try it awhile.
3. Explain to my father why I made the change and if he objected too much change it back.
4. Try to get my mother to defend my idea.
5. Say nothing and move the furniture to its former place.

Problem: Jane's home economics class has had lessons on salads and she knows they are nutritious. Her family does not usually have salads. Jane prepares a cottage cheese salad for dinner. No one in the family but Jane and her mother eat the salad.

______45. How would you feel if you were Jane?

1. They aren't used to salads and it may take time for them to enjoy a salad.
2. The family doesn't realize the nutritive value of a good diet.
3. The rest of the family might like another salad.
4. My family should at least try it.
5. I would expect it from men.

______46. What would you do?

1. Try a different salad the next time which contained foods the family liked.
2. Fix it for myself and my mother.
3. Convince them how good it is for them.
4. Eat my salad and tell them how good it was.
5. Explain that salads are nutritious and encourage them to try it.

Problem: Jane is aware that most of her friends have recreation rooms in their homes. She would also like to have a place for the gang to meet. She tells her parents that she would like a recreation room and that all her friends have one.

______47. How would you feel if you were Jane?

1. If we couldn't afford it I would be satisfied.
2. We can't have everything we want.
3. It would be nice to have a recreation room but it is not always possible.
4. I would want a part of my home to entertain in occasionally.
5. It is a family situation and must be worked out together.

______48. What would you do if you were Jane's parents?

1. Make a family project out for the planning of recreation facilities.
2. Discuss the possibility of having a recreation room.
3. Explain to Jane why they cannot afford a recreation room.
4. Allow Jane to use the living room occasionally.
5. Fix up the basement as a recreation room.

Problem: Your class in school is planning a pre-prom party. You are on the decorations committee and must spend a great deal of time working after school. Your parents object because they feel it is interfering with your other work, especially school work.

______49. How would you feel?

1. Some extra-class activity is a good experience providing it does not take too much of my time.
2. Be mature, grades come first.
3. My parents do not understand the situation.
4. I would want to work but school work comes first.
5. I need to do something other than school work.

______50. What would you do?

1. Make sure that my school work was done first.
2. Tell the committee chairman that I cannot work on the decoration.
3. Explain to my parents that things will soon be back to normal.
4. Work as much as I can on the decorations without neglecting other work.
5. Budget my time so that I could do both things.

APPENDIX B

		Page
B-1	Five school-size samples of homemaking teachers classified by response status and service as supervisor of student teachers	116
B-2	Five school-size samples of homemaking teachers classified by response status and participation in regional or state conferences of homemaking teachers	117
B-3	Five school-size samples of homemaking teachers classified by response status and degrees earned	118
B-4	Five school-size samples of homemaking teachers classified by response status and length of teaching experience	119
B-5	One to five-day conferences for homemaking teachers: participation frequencies classified by school-size strata and response status	120
B-6	Week-long or longer workshop for homemaking teachers: participation frequencies classified by school-size strata and response status	120
B-7	Institutes for teachers in several fields: participation frequencies classified by school-size strata and response status	120
B-8	Local faculty institute: participation frequencies classified by school-size strata and response status	121
B-9	Student teacher supervision experience: frequencies classified by school-size strata and response status	121
B-10	Current teaching of boys: frequencies classified by school-size strata and response status	121
B-11	Current pupil enrollment total: frequencies classified by school-size strata and response status	122
B-12	Current grade level taught: frequencies classified by school-size strata and response status	122

B-13 Adequacy of department facilities: frequencies classified by school-size strata and response status 123

B-14 Teacher's relation to principal: frequencies classified by school-size strata and response status 123

B-15 Predominant reason for choice of teaching profession: frequencies classified by school-size strata and response status 124

B-16 Length of teaching experience: frequencies classified by school-size strata and response status 124

B-17 Amount of graduate work completed: frequencies classified by school-size strata and response status 125

B-18 Time elapsed since earning college credit: frequencies classified by school-size strata and response status 125

B-19 Marital status: frequencies classified by school-size strata and response status 125

B-20 College graduation honors: frequencies classified by school-size strata and response status 126

B-21 Morale of school pupils: frequencies classified by school-size strata and response status 126

B-22 Time of making decision to enter profession: frequencies classified by school-size strata and response status 126

B-23 Satisfaction with teaching: frequencies classified by school-size strata and response status 127

B-24 Satisfaction with current position: frequencies classified by school-size strata and response status 127

B-25 Policy on private life restrictions: frequencies classified by school-size strata and response status 127

Table B-1. Five school-size samples of homemaking teachers classified by response status and service as supervisor of student teachers

Size Stratum and Supervisory Service	Complete Response	Partial Response	Non-Response
Total in school-size one stratum	119	49	22
Supervised in 1958-59	7	3	1
Did not supervise in 1958-59	111	45	15
Information not provided	1	1	6
Total in school-size two stratum	190	71	26
Supervised in 1958-59	39	5	1
Did not supervise in 1958-59	148	59	11
Information not provided	3	7	14
Total in school-size three stratum	157	55	17
Supervised in 1958-59	31	8	2
Did not supervise in 1958-59	121	46	5
Information not provided	5	1	10
Total in school-size four stratum	[illegible]5	42	18
Supervised in 1958-59	35	14	2
Did not supervise in 1958-59	80	26	5
Information not provided	0	2	11
Total in school-size five stratum	131	53	25
Supervised in 1958-59	31	10	4
Did not supervise in 1958-59	98	41	9
Information not provided	2	2	12
Total in all school-size strata	712	270	108
Supervised in 1958-59	143	40	10
Did not supervise in 1958-59	558	217	45
Information not provided	11	13	53

Table B-2. Five school-size samples of homemaking teachers classified by response status and participation in regional or state conference for homemaking teachers

Size Stratum and Conference Participation	Complete Response	Partial Response	Non-Response
Total in school-size one stratum	119	49	22
Participate in program	39	16	6
Attend without participating	56	27	5
Did not attend	22	6	4
Information not provided	2	0	7
Total in school-size two stratum	190	71	26
Participate in program	83	23	5
Attend without participating	72	34	3
Did not attend	31	13	3
Information not provided	4	1	15
Total in school-size three stratum	157	55	17
Participate in program	69	28	2
Attend without participating	59	22	2
Did not attend	28	5	2
Information not provided	1	0	11
Total in school-size four stratum	115	42	18
Participate in program	51	15	4
Attend without participating	50	19	1
Did not attend	12	7	2
Information not provided	2	1	11
Total in school-size five stratum	131	53	25
Participate in program	58	21	4
Attend without participating	54	22	4
Did not attend	17	8	4
Information not provided	2	2	13
Total in all school-size strata	712	270	108
Participate in program	300	103	21
Attend without participating	291	124	15
Did not attend	110	39	15
Information not provided	11	4	57

Table B-3. Five school-size samples of homemaking teachers classified by response status and degrees earned

Size Stratum and Degrees Earned	Complete Response	Partial Response	Non-Response
Total in school-size one stratum	119	49	22
Have less than M. A. Degree	99	41	15
Have M. A. Degree or more	20	7	0
Information not provided	0	1	7
Total in school-size two stratum	190	71	26
Have less than M. A. Degree	152	60	[illegible]
Have M. A. Degree or more	37	7	0
Information not provided	1	4	14
Total in school-size three stratum	157	55	17
Have less than M. A. Degree	125	39	6
Have M. A. Degree or more	31	14	1
Information not provided	1	2	10
Total in school-size four stratum	115	42	18
Have less than M. A. Degree	78	27	5
Have M. A. Degree or more	36	13	3
Information not provided	1	2	10
Total in school-size five stratum	131	53	25
Have less than M. A. Degree	77	31	7
Have M. A. Degree or more	53	21	6
Information not provided	1	1	12
Total in all school-size strata	712	270	108
Have less than M. A. Degree	531	198	45
Have M. A. Degree or more	177	62	10
Information not provided	4	10	53

Table B-4. Five school-size samples of homemaking teachers classified by response status and length of teaching experience

Size Stratum and Experience Length	Complete Response	Partial Response	Non-Response
Total in school-size one stratum	119	49	22
Less than one year teaching	11	7	1
One to less than three years	22	9	3
Three to less than five years	16	3	4
Five to less than ten years	31	11	3
Ten to less than twenty years	24	14	2
Twenty years or more	15	4	2
Information not provided	0	1	7
Total in school-size two stratum	190	71	26
Less than one year teaching	13	6	1
One to less than three years	26	10	1
Three to less than five years	25	11	2
Five to less than ten years	38	17	4
Ten to less than twenty years	64	12	2
Twenty years or more	24	11	2
Information not provided	0	4	14
Total in school-size three stratum	157	55	17
Less than one year teaching	13	2	0
One to less than three years	15	4	1
Three to less than five years	27	6	2
Five to less than ten years	36	11	2
Ten to less than twenty years	43	24	2
Twenty years or more	23	8	0
Information not provided	0	0	10
Total in school-size four stratum	115	42	18
Less than one year teaching	8	1	0
One to less than three years	11	5	0
Three to less than five years	14	2	0
Five to less than ten years	23	10	1
Ten to less than twenty years	31	14	1
Twenty years or more	27	9	5
Information not provided	1	1	11
Total in school-size five stratum	131	53	25
Less than one year teaching	5	1	0
One to less than three years	11	2	0
Three to less than five years	12	6	2
Five to less than ten years	28	13	1
Ten to less than twenty years	41	22	3
Twenty years or more	33	9	7
Information not provided	1	0	12
Total in all school-size strata	712	270	108
Less than one year teaching	50	17	2
One to less than three years	85	30	5
Three to less than five years	94	28	10
Five to less than ten years	156	62	11
Ten to less than twenty years	203	86	10
Twenty years or more	122	41	16
Information not provided	2	6	54

Table B-5. One to five-day conferences for homemaking teachers -- participation frequencies classified by school-size strata and response status

Conference Participation	School-Size Strata and Response Status									
	C1^a	P1^a	C2	P2	C3	P3	C4	P4	C5	P5
Did not attend in 1958-59	24	6	35	14	29	5	13	8	18	10
Attend only	56	27	72	35	59	22	50	19	54	22
Participated in program	39	16	83	22	69	28	51	15	58	21
Chi Square	1.675		3.756		2.728		1.936		0.838	

[a]C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

Table B-6. Week-long or longer workshop for homemaking teachers -- participation frequencies classified by school-size strata and response status

Workshop Participation	School-Size Strata and Response Status									
	C1^a	P1^a	C2	P2	C3	P3	C4	P4	C5	P5
Did not attend in 1958-59	87	35	131	42	115	36	73	26	84	31
Attend only	11	5	17	11	11	7	13	6	18	11
Participated in program	21	9	42	18	31	12	29	10	29	11
Chi Square	0.057		3.049		2.004		0.262		1.402	

[a]C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

Table B-7. Institutes for teachers in several fields -- participation frequencies classified by school-size strata and response status

Institute Participation	School-Size Strata and Response Status									
	C1^a	P1^a	C2	P2	C3	P3	C4	P4	C5	P5
Did not attend in 1958-59	48	28	81	23	64	13	37	15	56	21
Attend only	54	16	82	38	66	26	61	20	58	24
Participated in program	17	5	27	10	27	16	17	7	17	8
Chi Square	3.957		2.567		6.387*		0.363		0.221	

[a]C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate school-size stratum

* .01 P .05

Table B-8. Local faculty institute -- participation frequencies classified by school-size strata and response status

Local Institute Participation	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Did not attend in 1958-59	40	19	51	22	39	6	24	8	36	19
Attend only	42	14	79	23	64	24	53	16	60	20
Participated in program	37	16	60	26	54	25	38	18	35	14
Chi Square	0.761		1.831		5.142		3.061		1.450	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate school-size stratum

Table B-9. Student teacher supervision experience -- frequencies classified by school-size strata and response status

Student Teacher Supervision	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Never supervised student teachers	99	40	131	53	92	34	52	22	56	26
Supervised prior or in 1958-59 without special preparation	13	3	23	13	30	12	36	6	40	11
Supervised prior or in 1958-59 with special preparation	7	6	36	5	35	9	27	14	35	16
Chi Square	2.666		6.344		0.912		4.810		1.803	

[a] C- Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

Table B10. Current teaching of boys -- frequencies classified by school-size strata and response status

	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Have both boys & girls in class	37	18	40	11	21	7	18	9	33	17
Only girls in class	82	31	150	60	136	48	96	33	98	36
Chi Square	0.502		1.016		0.015		0.682		0.904	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

Table B-11. Current pupil enrollment total -- frequencies classified by school-size strata and response status

Total Class Enrollment	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Less than 50 pupils	33	10	25	6						
50-74 pupils	44	19	48	15	30[c]	8[c]	23[c]	3[c]	10[c]	6[c]
75-99 pupils	22	9	55	17	48	22	36	13	35	11
100-124 pupils	20[b]	11[b]	46	23	40	15	39	18	51	18
125 or more			16	10	39	10	17	8	35	18
Chi Square	1.356		4.773		2.401		4.101		2.062	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

[b] 100 or more pupils

[c] less than 75 pupils

Table B-12. Current grade level taught -- frequencies classified by by school-size strata and response status

Grade Level	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Jr. High only					33	5	26	7	42	25
Sr. High only	34[b]	13[b]	77[b]	28[b]	62	26	60	22	64	22
Some classes at each level	85	36	113	43	62	24	29	13	25	6
Chi Square	0.989		0.025		4.000		0.895		2.146	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

[b] Total frequencies for Junior High only and Senior High only

Table B-13. Adequacy of department facilities -- frequencies classified by school-size strata and response status

Adequacy of Facilities	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Adequate for all areas in H.E.	31	17	70	30	77	27	49	24	72	28
Adequate for some phases only	59	20	68	23	44	16	41	10	39	18
Inadequate: with improvement plans	19	8	46	13	30	8				
Inadequate: with no improvement plans	10	4	6	5	6	4	25[b]	8[b]	20[b]	7[b]
Chi Square	1.480		3.212		1.518		2.832		0.354	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

[b] Sum of frequencies in last two categories - Inadequate facilities

Table B-14. Teacher's relation to principal -- frequencies classified by school-size strata and response status

Teacher's Relation to Principal	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
P. helps me work out problems	34	13	53	14	42	20	30	18	36	22
P. leaves me alone	17	11	26	9	27	9	11	13	23	7
P. gives suggestions when sought	68	25	111	48	88	26	74	11	72	24
Chi Square	1.674		2.101		1.887		20.309**		7.331*	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

*.02 P .05 ** P .01

Table B-15. Predominant reason for choice of teaching profession -- frequencies classified by school-size strata and response status

Predominant	School-Size Strata and Response Status									
Reason	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
I like children	18	5	49	13	27	11	14	11	31	12
Like to teach things to others	40	20	59	25	46	11	48	15	40	14
Convenience and expedience	17	6	17	9	18	8	8	2	13	6
Influence of advisors	13	5	24	5	16	9	15	2	10	5
Cultural & idealistic reasons	21	8	18	12	19	9	25	9	14	6
Others in family were teachers	10	5	23	7	31	7	5	3	23	10
Chi Square	1.402		6.377		8.539		6.728[b]		0.506	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

[b] Small frequencies render validity of Chi Square doubtful

Table B-16. Length of teaching experience -- frequencies classified by school-size strata and response status

Length of Teaching Experience	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Less than 1 year	11	7	13	6						
1 to 2.9 years	22	10	26	13	28[b]	6[b]				
3 to 4.9 years	16	3	25	10	27	6	33[c]	9[c]	28[c]	9[c]
5 to 9.9 years	31	11	38	19	36	11	23	10	28	13
10 to 19.9 years	24	14	64	12	43	24	31	14	41	22
20 yrs or more	15	4	24	11	23	8	27	9	33	9
Chi Square	4.405		7.353		5.813		1.305		2.783	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

[b] Less than 3 years

[c] Less than 5 years

Table B-17. Amount of graduate work completed -- frequencies classified by school-size strata and response status

Graduate Work Completed	School-Size Strata and Response Status C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
None	44	25	52	24	38	10	22	8	16	9
Some, but less than half M.A.	47	13	69	34	68	27	44	15	45	16
Over half but M.A. incomplete	8	4	32	6	20	4	13	6	17	7
M.A. or equivalent	20[b]	7[b]	37[b]	7[b]	14	6	10	3	17	8
More than M.A.					17	8	26	10	36	13
Chi Square	3.539		7.822*		2.679		0.388		1.078	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

[b] Total M.A. or equivalent and more than M.A.

* P = .05

Table B-18. Time elapsed since earning college credit -- frequencies classified by school-size strata and response status

Time Elapsed Since College Work	School-Size Strata and Response Status C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Less than 1 year	58	21	80	28	69	15	53	17	53	16
1 to 2.9 years	23	6	55	20	38	14	29	8	46	14
3 to 4.9 years	16	6	20	10	22	13	22	7	20	14
5 to 9.9 years	11	3	17	7	12	6	11[b]	10[b]	12[b]	9[b]
10 years or more	11	13	18	6	16	7				
Chi Square	8.968		0.774		5.923		5.482		6.497	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

[b] Five years or more

Table B-19. Marital status -- frequencies classified by school-size strata and response status

Marital Status	School-Size Strata and Response Status C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Single	28	12	47	16	40	13	37	10	47	14
Married, without children	30	12	49	17	47	17	26	15	32	20
Married, have children	51	23	76	34	56	20	38	14	39	16
Widowed or divorced	10	2	18	4	14	5	14	3	13	3
Chi Square	1.059		1.840		0.075		3.462		4.175	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

Table B-20. College graduation honors -- frequencies classified by school-size strata and response status

College Graduation Honors	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
None	101	33	151	58	102	46	81	32	94	39
Cum Laude or with distinction	13	13	32	9	46	5	29	6	30	12
Higher honors	5	3	7	4	9	4	5	4	7	2
Chi Square	7.068*		1.069		9.105**		3.228		0.209	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

* $.02 < P < .05$

** $.01 < P < .02$

Table B-21. Morale of school pupils -- frequencies classified by school-size strata and response status

Morale of School Pupils	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Excellent Morale	24	10	48	17	47	11	37	14	47	19
Good Morale	75	34	121	45	88	36	61	23	76	29
Fair or poorer	20	5	21	9	22	8	17	5	8	5
Chi Square	1.234		0.155		2.094		0.211		0.663	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

Table B-22. Time of making decision to enter profession -- frequencies classified by school-size strata and response status

Time of Decision	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Always wanted to be teacher	20	10	46	8	36	13	20	8	31	6
Before College	56	21	84	34	67	27	42	21	44	28
First or second year in college	25	9	25	16	28	9	23	7	28	14
After second year in college	18	8	35	9	26	6	28	5	28	5
Chi Square	4.012		8.300*		1.299		3.896		9.849**	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

* $.02 < P < .05$

** $.01 < P < .02$

Table B-23. Satisfaction with teaching -- frequencies classified by school-size strata and response status

Satisfaction with Teaching	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Excellent	34	14	52	19	34	10	33	13	41	12
Very well - definitely best	38	20	80	27	57	20	38	18	54	23
Well, or less satisfied	47	15	58	25	66	25	44	11	36	18
Chi Square	1.536		0.573		2.924		2.163		1.564	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

Table B-24. Satisfaction with current position -- frequencies classified by school-size strata and response status

Satisfaction with Position	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
Excellent	37	15	65	28	63	18	48	21	64	21
Very Well	51	26	87	26	57	20	48	13	52	26
Well, or less satisfied	31	8	38	17	37	17	19	8	15	6
Chi Square	2.205		1.781		1.803		1.513		1.477	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

Table B-25. Policy on private life restrictions -- frequencies classified by school-size strata and response status

Private Life Restrictions	School-Size Strata and Response Status									
	C1[a]	P1[a]	C2	P2	C3	P3	C4	P4	C5	P5
No restrictions at all	41	12	44	23	41	16	40	10	54	15
Some suggested codes on rest.	78	37	146	48	116	39	75	32	77	38
Chi Square	1.595		2.311		0.134		1.707		2.687	

[a] C-Respondents providing complete data; P-Respondents providing partial data. Numerals following C and P indicate the school-size stratum

APPENDIX C

		Page
C-1	Internal consistency reliability and two-way analysis of variance among respondents and among items of attitude toward school-community	129
C-2	Internal consistency reliability and two-way analysis of variance among respondents and among items of attitude toward profession	129
C-3	Internal consistency reliability and two-way analysis of variance among respondents and among items of attitude toward community	129
C-4	Internal consistency reliability and two-way analysis of variance among respondents and among items of professional attitude PP -- the sum of SC, P, and C	129
C-5	Internal consistency reliability and two-way analysis of variance among respondents and among items of familiar interpersonal relations	130
C-6	Internal consistency reliability and two-way analysis of variance among respondents and among items of attitude toward subject matter	130
C-7	Internal consistency reliability and two-way analysis of variance among respondents and among items of the Minnesota teacher attitude inventory	130
C-8	Internal consistency reliability and two-way analysis of variance among respondents and among items of the homemaking teacher attitude inventory	130

Table C-1. Internal consistency reliability and two-way analysis of variance among respondents and among items of attitude toward school-community (SC)

Source of Variation	d.f.	Sum of Sq.	Mean Sq.
Among Items	59	221.9046	3.7611
Among Respondents	53	31.7472	.5990
Interaction	3127	908.6787	.2906
Total	3240	1162.3305	

Reliability Coefficient $r_{..} = \frac{.5990 - .2906}{.5990} = .51$

Table C-2. Internal consistency reliability and two-way analysis of variance among respondents and among items of attitude toward profession (P)

Source of Variation	d.f.	Sum of Sq.	Mean Sq.
Among Items	89	426.07202	4.78732
Among Respondents	53	34.92017	.65887
Interaction	4717	1175.28354	.24915
Total	4859	1636.27573	

Reliability Coefficient $r_{..} = \frac{.65887 - .24915}{.65887} = .62$

Table C-3. Internal consistency reliability and two-way analysis of variance among respondents and among items of attitude toward community (C)

Source of Variation	d.f.	Sum of Sq.	Mean Sq.
Among Items	89	612.02204	6.87665
Among Respondents	53	85.02204	1.60418
Interaction	4717	1267.31130	.26866
Total	4859	1964.35538	

Reliability Coefficient $r_{..} = \frac{1.60418 - .26866}{1.60418} = .83$

Table C-4. Internal consistency reliability and two-way analysis of variance among respondents and among items of professional attitude (PP) -the sum of SC, P and C

Source of Variation	d.f.	Sum of Sq.	Mean Sq.
Among Items	239	1217.3703	5.0935
Among Respondents	53	65.0958	1.2282
Interaction	12667	3437.8672	.2714
Total	12969	4720.3333	

Reliability Coefficient $r_{..} = \frac{1.2282 - .2714}{1.2282} = .78$

Table C-5. Internal consistency reliability and two-way analysis of variance among respondents and among items of familiar interpersonal relations (F)

Source of Variation	d.f.	Sum of Sq.	Mean Sq.
Among Items	40	261.0931	6.5273
Among Respondents	53	221.5443	4.1800
Interaction	2120	1415.9557	.6679
Total	2213	1898.5931	

Reliability Coefficient $r_{..} = \frac{4.1800 - .6679}{4.1800} = .84$

Table C-6. Internal consistency reliability and two-way analysis of variance among respondents and among items of attitude toward subject matter (SM)

Source of Variation	d.f.	Sum of Sq.	Mean Sq.
Among Items	111	512.0660	4.6132
Among Respondents	53	89.4463	1.6876
Interaction	5883	2051.2019	.3486
Total	6047	2652.7142	

Reliability Coefficient $r_{..} = \frac{1.6876 - .3486}{1.6876} = .79$

Table C-7. Internal consistency reliability and two-way analysis of variance among respondents and among items of the Minnesota teacher attitude inventory

Source of Variation	d.f.	Sum of Sq.	Mean Sq.
Among Items	149	1552.4352	10.4190
Among Respondents	53	422.2322	7.9666
Interaction	7897	5484.3048	.6945
Total	8099	7458.9722	

Reliability Coefficient $r_{..} = \frac{7.9666 - .6945}{7.9666} = .91$

Table C-8. Internal consistency reliability and two-way analysis of variance among respondents and among items of the homemaking teacher attitude inventory

Source of Variation	d.f.	Sum of Sq.	Mean Sq.
Among Items	74	377.8479	5.1060
Among Respondents	53	106.9257	2.0174
Interaction	3922	1400.6864	.3571
Total	4049	1885.4600	

Reliability Coefficient $r_{..} = \frac{2.0174 - .3571}{2.0174} = .82$

APPENDIX D

		Page
D 1-7	Within strata variances of attitude inventory scores and tests of the homogeniety of these variances	132 - 134
D 8-22	Analysis of variance of attitude inventory scores of norm samples classified according to response on certain biographical items	134 - 148

Table D-1. School community attitude (SC) within strata variances

Strata	N	Sum Scores	Sum Squares	Within Strata S. Sq.	Mean Square	Mean
I	119	2633	62639	4381.11	37.13	22.13
II	190	4321	103997	5728.36	30.31	22.74
III	157	3556	86058	5515.73	35.36	22.65
IV	115	2580	61506	3624.26	31.79	22.43
V	131	2858	67680	5327.60	40.98	21.82
Sum	712	15948	381880	24,577.06		22.40

$\text{Max } F = \frac{40.98}{30.31} = 1.35 \qquad P > .05$

Table D-2. Attitude toward profession (P) within strata variances

Strata	N	Sum Scores	Sum Squares	Within Strata S. Sq.	Mean Square	Mean
I	119	6209	332,071	8,107.29	68.71	52.18
II	190	10125	553,849	14,293.08	75.62	53.29
III	157	8461	467,437	11,459.16	73.46	53.89
IV	115	5997	320,565	7,834.49	68.72	52.15
V	131	6815	363,347	8,810.93	67.78	52.02
Sum	712	37,607	2,037,269	50,504.95		52.82

$\text{Max } F = \frac{75.62}{67.78} = 1.12 \qquad P > .05$

Table D-3. Attitude toward community (C) within strata variances

Strata	N	Sum Scores	Sum Squares	Within Strata S. Sq.	Mean Square	Mean
I	119	5588	270,928	8,526.79	72.26	46.96
II	190	9122	452,148	14,195.98	75.11	48.01
III	157	7339	354,947	11,883.81	76.18	46.75
IV	115	5334	256,080	8,675.17	76.10	46.38
V	131	5892	275,854	10,848.93	83.45	44.98
Sum	712	33,275	1,609,957	54,130.68		46.73

$\text{Max } F = \frac{83.45}{72.26} = 1.15 \qquad P > .05$

Table D-4. Subject matter attitude (Sm) within strata variances

Strata	N	Sum Scores	Sum Squares	Within Strata S. Sq.	Mean Square	Mean
I	119	4118	152, 264	9760. 44	82. 72	34. 61
II	190	6700	247, 630	11366. 84	60. 14	35. 26
III	157	5769	224, 033	12049. 31	77. 24	36. 75
IV	115	4327	171, 391	8582. 92	75. 29	37. 63
V	131	4881	190, 407	8543. 18	65. 72	37. 26
Sum	712	25795	985, 725	50, 302. 69		36. 23

Max F = $\frac{82.72}{60.14} = 1.38$ $P > .05$

Table D-5. HTAI Attitude within strata variances

Strata	N	Sum Scores	Sum Squares	Within Strata S. Sq.	Mean Square	Mean
I	119	6017	323, 541	19, 303. 28	163. 59	50. 56
II	190	9752	535, 306	34, 771. 77	183. 98	51. 33
III	157	8300	469, 470	30, 680. 19	196. 67	52. 87
IV	115	6222	356, 648	20, 010. 75	175. 53	54. 10
V	130	6910	391, 106	23, 812. 92	184. 60	53. 15
Sum	711	37, 201	2, 076, 071	128, 578. 91		52. 32

Max F = $\frac{196.67}{163.59} = 1.20$ $P > .05$

Table D-6. MTAI attitude within strata variances

Strata	N	Sum Scores	Sum Squares	Within Strata S. Sq.	Mean Square	Mean
I	119	12,000	1, 338, 388	128, 303. 97	1087. 32	100. 84
II	190	18, 982	2, 123, 084	226, 682. 29	1199. 38	99. 91
III	157	16, 580	1, 939, 162	188, 229. 52	1206. 60	105. 61
IV	115	12, 651	1, 540, 483	148, 762. 99	1304. 94	110. 01
V	130	14, 568	1, 813, 516	181, 003. 51	1403. 13	112. 06
Sum	711	74, 781	8, 754, 633	872, 982. 28		105. 18

Max F = $\frac{1403.13}{1087.32} = 1.29$ $P > .05$

Table D-7. Familiar interpersonal attitude (F) within strata variances

Strata	N	Sum Scores	Sum Squares	Within Strata S. Sq.	Mean Square	Mean
I	119	5673	282, 705	12, 260. 22	103. 90	47. 67
II	190	9215	470, 813	23, 885. 50	126. 38	48. 50
III	157	7623	386, 149	16, 020. 79	102. 70	48. 55
IV	115	5790	307, 574	16, 060. 09	140. 88	50. 35
V	131	6673	354, 591	14, 675. 51	112. 89	50. 94
Sum	712	34, 974	1, 801, 832	82, 902. 11		49. 12

$\text{Max F} = \dfrac{140.88}{102.70} = 1.37 \qquad P > .05$

Table D-8. Analysis of variance between means on teacher attitudes of groups classified by service as supervisor of student teachers

Attitude Inventory	Source of Variance	Sum of Square	d. f.	Mean Square	F
Att. toward Profession (P)	Total	50, 909. 63	711		
	Bet. means	493. 49	1	493. 49	6. 95**
	With. gr.	50, 416. 14	710	71. 00	
Minn. Teach. Att. Inven. MTAI	Total	889, 375. 67	710		
	Bet. means	32, 170. 59	1	32, 170. 59	26. 6**
	With. gr.	857, 205. 08	709	1, 209. 03	
Homemaking Teacher Att. HTAI	Total	129, 637. 24	710		
	Bet. means	2, 221. 94	1	2, 221. 94	12. 4**
	With. gr.	127, 415. 30	709	179. 71	
Fam. Interpersonal Relations (F)	Total	83, 881. 61	711		
	Bet.means	1, 403. 69	1	1, 403. 69	12. 1**
	With. gr.	82, 447. 92	710	116. 17	
Subj. Matter Preference (SM)	Total	51, 199. 68	711		
	Bet.means	958. 41	1	958. 41	13. 5**
	With. gr.	50, 241. 27	710	70. 86	

** $P < .01$

Table D-9. Analysis of variance among means on teacher attitudes of groups classified by class responsibilities listed in Table 37

Attitude Inventory	Source of Variance	Sum of Square	d. f.	Mean Square	F
Subj. Matter	Total	51, 199. 68	711		
Preference	Among gr.	533. 27	3	177. 76	2. 46
(SM)	With. gr.	50, 666. 41	708	71. 56	
Minn. Teach.	Total	889, 375. 67	710		
Att. Inven.	Among gr.	27, 857. 55	3	9285. 85	7. 63**
MTAI	With. gr.	861, 518. 12	707	1216. 83	
Homemaking	Total	129, 637. 24	710		
T. Att. Inv.	Among gr.	2, 929. 18	3	976. 39	5. 45**
HTAI	With. gr.	126, 708. 06	707	179. 22	
Fam. Inter-	Total	83, 881. 61	711		
personal Re-	Among gr.	1, 739. 91	3	579. 97	5. 00**
lations (F)	With. gr.	82, 141. 70	708	116. 02	
Att. toward	Total	50, 909. 63	711		
profession	Among gr.	779. 73	3	259. 91	3. 67*
(P)	With. gr.	50, 129. 90	708	70. 80	
Att. toward	Total	54, 864. 83	711		
community	Among gr.	1, 732. 16	3	577. 39	7. 69**
(C)	With. gr.	53, 132. 67	708	75. 05	
Att. toward	Total	24, 662. 71	711		
School com.	Among gr.	74. 74	3	24. 91	$F<1$
(SC)	With. gr.	24, 587. 97	708	32. 73	$P>.05$

** $P<.01$ * $.01<P<.05$

Table D-10. Analysis of variance among means on teacher attitudes of groups classified by population of school district

Attitude Inventory	Source of Variance	Sum of Square	d. f.	Mean Square	F
Subj. Matter	Total	51, 199. 68	711		
Preference	Among gr.	725. 30	4	181. 33	2. 53*
(SM)	With. gr.	50, 474. 38	707	71. 39	
Minn. Teach.	Total	889, 375. 67	710		
Att. Inven.	Among gr.	30, 557. 83	4	7639. 46	6. 28**
MTAI	With. gr.	858, 817. 84	706	1216. 46	
Homemaking	Total	129, 637. 24	710		
Teacher Att.	Among gr.	3, 114. 30	4	778. 58	5. 28**
HTAI	With. gr.	126, 522. 94	706	179. 21	
Fam. Inter-	Total	83, 881. 61	711		
personal Re-	Among gr.	1, 888. 63	4	472. 15	4. 07**
lations (F)	With. gr.	81, 992. 98	707	115. 97	
Att. toward	Total	50, 909. 63	711		
profession	Among gr.	149. 09	4	37. 27	. 51
(P)	With. gr.	50, 760. 54	707	71. 79	P . 05
Att. toward	Total	54, 864. 83	711		
Community	Among gr.	927. 58	4	231. 89	3. 03*
(C)	With. gr.	53, 937. 25	707	76. 29	
Att. toward	Total	24, 662. 71	711		
school com.	Among gr.	329. 18	4	82. 30	2. 39
(SC)	With. gr.	24, 333. 53	707	34. 42	$P > .05$

** $P < .01$ * $.01 < P < .05$

Table D-11. Analysis of variance among means on teacher attitudes of groups classified by teachers' perception of pupil relations as in Table 45

Attitude Inventory	Source of Variance	Sum of Square	d. f.	Mean Square	F
Subj. Matter preference (SM)	Total	51, 199. 68	711		
	Among gr.	468. 13	3	156. 04	2. 18
	With. gr.	50, 731. 55	708	71. 65	P>. 05
Minn. Teach. Att. Inven. MTAI	Total	889, 375. 67	710		
	Among gr.	26, 244. 01	3	8748. 00	7. 17**
	With. gr.	863, 131. 66	707	1220. 84	
Homemaking Teacher Att. HTAI	Total	129, 637. 24	710		
	Among gr.	2, 305. 70	3	768. 6	4. 27**
	With. gr.	127, 331. 54	707	180. 1	
Fam. Interpersonal Relations (F)	Total	83, 881. 61	711		
	Among gr.	1, 141. 17	3	380. 39	3. 25*
	With. gr.	82, 740. 44	708	116. 87	
Att. toward profession (P)	Total	50, 909. 63	711		
	Among gr.	1, 008. 54	3	336. 18	4. 76**
	With. gr.	49, 901. 09	708	70. 48	
Att. toward community (C)	Total	54, 864. 83	711		
	Among gr.	1, 803. 30	3	601. 10	8. 02**
	With. gr.	53, 061. 53	708	74. 95	
Att. toward school com. (SC)	Total	24, 662. 71	711		
	Among gr.	180. 42	3	60. 14	1. 74
	With. gr.	24, 482. 29	708	34. 58	P>. 05

** $P < .01$ * $.01 < P < .05$

Table D-12. Analysis of variance among means on teacher attitudes of groups classified according to predominant reason for selecting profession

Attitude Inventory	Source of Variance	Sum of Square	d.f.	Mean Square	F
Subj. Matter	Total	51,199.68	711		
preference	Among gr.	391.34	4	97.84	1.36
(SM)	With. gr.	50,808.34	707	71.86	$P > .05$
Minn. Teach.	Total	889,375.67	710		
Att. Inven.	Among gr.	19,613.35	4	4904.01	3.98**
MTAI	With. gr.	869,762.33	706	1231.95	
Homemaking	Total	129,637.24	710		
Teacher Att.	Among gr.	1,252.19	4	313.05	1.72
HTAI	With. gr.	128,385.05	706	181.85	$P > .05$
Fam. Inter-	Total	83,881.61	711		
personal Re-	Among gr.	931.38	4	232.85	2.00
lations (F)	With. gr.	81,950.23	707	115.91	
Att. toward	Total	50,909.63	711		
profession	Among gr.	758.76	4	189.69	2.67*
(P)	With. gr.	50,150.87	707	70.93	
Att. toward	Total	54,864.83	711		
community	Among gr.	910.10	4	227.53	2.98*
(C)	With. gr.	53,954.73	707	76.32	
Att. toward	Total	24,662.71	711		
school com.	Among gr.	520.42	4	130.11	3.81**
(SC)	With. gr.	24,142.29	707	34.15	

** $P < .01$ * $.01 < P < .05$

Table D-13. Analysis of variance among means on teacher attitudes of groups classified according to time they made decision to enter the teaching profession as indicated in Item 61

Attitude Inventory	Source of Variance	Sum of Square	d. f.	Mean Square	F
Subj. Matter preference (SM)	Total	51, 199.68	711		
	Among gr.	593.81	8	74.23	1.03
	With. gr.	50, 605.87	703	71.99	
Minn. Teach. Att. Inven. MTAI	Total	889, 375.67	710		
	Among gr.	18, 114.57	8	2264.32	1.82
	With. gr.	871, 261.10	702	1241.11	
Homemaking Teacher Att. HTAI	Total	129, 637.24	710		
	Among gr.	2, 494.19	8	311.77	1.72
	With. gr.	127, 143.05	702	181.12	
Fam. Interpersonal Relations (F)	Total	83, 881.61	711		
	Among gr.	1, 271.20	8	158.90	1.35
	With. gr.	82, 610.41	703	117.51	
Att. toward profession (P)	Total	50, 909.63	711		
	Among gr.	636.26	8	79.53	1.11
	With. gr.	50, 273.37	703	71.51	
Att. toward community (C)	Total	54, 864.83	711		
	Among gr.	508.90	8	63.61	0.82
	With. gr.	54, 355.93	703	77.32	
Att. toward school com. (SC)	Total	24, 662.71	711		
	Among gr.	406.54	8	50.82	1.47
	With. gr.	24, 256.17	703	34.50	

Table D-14. Analysis of variance between means on teacher attitudes of groups classified by graduation honors

Attitude Inventory	Source of Variance	Sum of Square	d. f.	Mean Square	F
Subj. Matter	Total	51, 199. 68	711		
preference	Bet. grs.	744. 23	1	744. 23	10. 47**
(SM)	With. gr.	50, 455. 45	710	71. 06	
Minn. Teach.	Total	889, 375. 67	710		
Att. Inven.	Bet. grs.	2, 689. 55	1	2689. 55	2. 15
MTAI	With. gr.	886, 686. 12	709	1250. 62	
Homemaking	Total	129, 637. 24	710		
Teacher Att.	Bet. grs.	689. 26	1	689. 26	3. 79
HTAI	With. gr.	128, 947. 98	709	181. 87	
Fam. Inter-	Total	83, 881. 61	711		
personal Re-	Bet. grs.	605. 37	1	605. 37	5. 16*
lations (F)	With. gr.	83, 276. 24	710	117. 29	
Att. toward	Total	50, 909. 63	711		
profession	Bet. grs.	23. 17	1	23. 17	0. 32
(P)	With. gr.	50, 886. 46	710	71. 67	
Att. toward	Total	54, 864. 83	711		
community	Bet. grs.	117. 54	1	117. 54	1. 52
(C)	With. gr.	54, 747. 29	710	77. 11	
Att. toward	Total	24, 662. 71	711		
school com.	Bet. grs.	7. 09	1	7. 09	0. 20
(SC)	With. gr.	24, 655. 62	710	34. 73	

* $.01 < P(F) < .05$ ** $P(F) < .01$

Table D-15. Analysis of variance among means on teacher attitudes of groups classified according to the amount of graduate work

Attitude Inventory	Source of Variance	Sum of Square	d.f.	Mean Square	F
Subj. Matter	Total	51,199.68	711		
preference	Among gr.	819.25	4	204.81	2.87*
(SM)	With. gr.	50,380.43	707	71.26	
Minn. Teach.	Total	889,375.67	710		
Att. Inven.	Among gr.	28,931.85	4	7232.96	5.93**
MTAI	With. gr.	860,443.82	706	1218.76	
Homemaking	Total	129,637.24	710		
Teacher Att.	Among gr.	3,897.90	4	974.48	5.47**
HTAI	With. gr.	125,739.34	706	178.10	
Fam. Inter-	Total	83,881.61	711		
personal Re-	Among gr.	202.57	4	50.64	0.43
lations (F)	With. gr.	83,679.04	707	118.36	
Att. toward	Total	50,909.63	711		
profession	Among gr.	175.24	4	43.81	0.61
(P)	With. gr.	50,734.39	707	71.76	
Att. toward	Total	54,864.83	711		
community	Among gr.	655.65	4	163.91	2.14
(C)	With. gr.	54,209.18	707	76.67	
Att. toward	Total	24,662.71	711		
school com.	Among gr.	106.13	4	26.53	0.76
(SC)	With. gr.	24,556.58	707	34.73	

* $.01 < P(F) < .05$ ** $P(F) < .01$

Table D-16. Analysis of variance among means on teacher attitudes of groups classified according to time since last academic credit was earned

Attitude Inventory	Source of Variance	Sum of Square	d.f.	Mean Square	F
Subj. Matter	Total	51,199.68	711		
preference	Among gr.	489.65	5	97.93	1.36
(SM)	With. gr.	50,710.03	706	71.83	
Minn. Teach.	Total	889,375.67	710		
Att. Inven.	Among gr.	10,717.63	5	2143.53	1.72
MTAI	With. gr.	878,658.04	705	1246.32	
Homemaking	Total	129,637.24	710		
Teacher Att.	Among gr.	958.64	5	191.73	1.05
HTAI	With. gr.	128,678.60	705	182.52	
Fam. Inter-	Total	83,881.61	711		
personal Re-	Among gr.	2,187.09	5	437.42	3.78**
lations (F)	With. gr.	81,694.52	706	115.71	
Att. toward	Total	50,909.63	711		
profession	Among gr.	1,337.21	5	267.44	3.81**
(P)	With. gr.	49,572.42	706	70.22	
Att. toward	Total	54,864.83	711		
community	Among gr.	375.91	5	75.18	0.97
(C)	With. gr.	54,488.92	706	77.18	
Att. toward	Total	24,662.71	711		
school com.	Among gr.	288.38	5	57.68	1.67
(SC)	With. gr.	24,374.33	706	34.52	

** $P(F) < .01$

Table D-17. Analysis of variance among means on teacher attitudes of groups classified according to one or more days of conference attendance as in Table 55

Attitude Inventory	Source of Variance	Sum of Square	d. f.	Mean Square	F
Subj. Matter preference (SM)	Total	51, 199. 68	711		
	Among gr.	339. 11	2	169. 55	2. 36
	With. gr.	50, 860. 57	709	71. 73	
Minn. Teach. Att. Inven. MTAI	Total	889, 375. 67	710		
	Among gr.	5, 668. 91	2	2834. 45	2. 27
	With. gr.	883, 706. 76	708	1248. 17	
Homemaking Teacher Att. HTAI	Total	129, 637. 24	710		
	Among gr.	453. 18	2	226. 59	1. 24
	With. gr.	129, 184. 06	708	182. 46	
Fam. Interpersonal Relations (F)	Total	83, 881. 61	711		
	Among gr.	310. 84	2	155. 42	1. 32
	With. gr.	83, 570. 77	709	117. 87	
Att. toward profession (P)	Total	50, 909. 63	711		
	Among gr.	1, 344. 20	2	672. 10	9. 61**
	With. gr.	49, 565. 43	709	69. 91	
Att. toward community (C)	Total	54, 864. 83	711		
	Among gr.	746. 86	2	373. 43	4. 89**
	With. gr.	54, 117. 97	709	76. 33	
Att. toward school com. (SC)	Total	24, 662. 71	711		
	Among gr.	193. 16	2	96. 58	2. 80
	With. gr.	24, 469. 55	709	34. 51	

** P(F) $>$ .01

Table D-18. Analysis of variance among means on teacher attitudes of groups classified according to attendance at a workshop of a week or more as indicated on Table 56

Attitude Inventory	Source of Variance	Sum of Square	d.f.	Mean Square	F
Subj. Matter preference (SM)	Total	51,199.68	711		
	Among gr.	612.47	3	204.16	2.86*
	With. gr.	50,587.21	708	71.45	
Minn. Teach. Att. Inven. MTAI	Total	889,375.67	710		
	Among gr.	2,192.65	3	730.88	0.58
	With. gr.	887,183.02	707	1254.86	
Homemaking Teacher Att. HTAI	Total	129,637.24	710		
	Among gr.	239.29	3	79.76	0.44
	With. gr.	129,397.95	707	183.02	
Fam. Interpersonal Relations (F)	Total	83,881.61	711		
	Among gr.	168.81	3	56.27	0.48
	With. gr.	83,712.80	708	118.24	
Att. toward profession (P)	Total	50,909.63	711		
	Among gr.	534.83	3	178.28	2.51
	With. gr.	50,374.80	708	71.15	
Att. toward community (C)	Total	54,864.83	711		
	Among gr.	910.99	3	303.66	3.98**
	With. gr.	53,953.84	708	76.21	
Att. toward school com. (SC)	Total	24,662.71	711		
	Among gr.	145.04	3	48.35	1.40
	With. gr.	24,517.67	708	34.63	

* $.01 < P(F) < .05$ ** $P(F) < .01$

Table D-19. Analysis of variance among means on teacher attitudes of groups classified according to their feeling about the profession

Attitude Inventory	Source of Variance	Sum of Square	d.f.	Mean Square	F
Subj. Matter	Total	51,199.68	711		
preference	Among gr.	464.46	3	154.82	2.16
(SM)	With. gr.	50,735.22	708	71.66	
Minn. Teach.	Total	889,375.67	710		
Att. Inven.	Among gr.	18,592.57	3	6197.53	5.03**
MTAI	With. gr.	870,783.08	707	1231.65	
Homemaking	Total	129,637.24	710		
Teacher Att.	Among gr.	1,516.16	3	505.39	2.79*
HTAI	With. gr.	128,121.08	707	181.22	
Fam. Inter-	Total	83,881.61	711		
personal Re-	Among gr.	1,065.65	3	355.22	3.04*
lations (F)	With. gr.	82,815.96	708	116.97	
Att. toward	Total	50,909.63	711		
profession	Among gr.	2,235.56	3	745.19	10.84**
(P)	With. gr.	48,674.07	708	68.75	
Att. toward	Total	54,864.83	711		
community	Among gr.	13,935.88	3	4645.29	80.35**
(C)	With. gr.	40,928.95	708	57.81	
Att. toward	Total	24,662.71	711		
school com.	Among gr.	478.62	3	159.54	4.67**
(SC)	With. gr.	24,184.09	708	34.15	

* $.01 < P(F) < .05$ ** $P(F) < .01$

Table D-20. Analysis of variance among means on teacher attitudes of groups classified according to their feeling toward their present position as indicated in Table 58

Attitude Inventory	Source of Variance	Sum of Square	d. f.	Mean Square	F
Subj. Matter preference (SM)	Total	51, 199. 68	711		
	Among gr.	419. 01	3	139. 67	1. 95
	With. gr.	50, 780. 67	708	71. 72	
Minn. Teach. Att. Inven. MTAI	Total	889, 375. 67	710		
	Among gr.	8, 723. 16	3	2907. 72	2. 33
	With. gr.	880, 652. 51	707	1245. 62	
Homemaking Teacher Att. HTAI	Total	129, 637. 24	710		
	Among gr.	1, 752. 93	3	584. 31	3. 23*
	With. gr.	127, 884. 31	707	180. 88	
Fam. Interpersonal Relations (F)	Total	83, 881. 61	711		
	Among gr.	717. 46	3	239. 15	2. 04
	With. gr.	83, 164. 15	708	117. 46	
Att. toward profession (P)	Total	50, 909. 63	711		
	Among gr.	921. 29	3	307. 10	4. 35**
	With. gr.	49, 988. 34	708	70. 61	
Att. toward community (C)	Total	54, 864. 83	711		
	Among gr.	1, 363. 64	3	454. 55	6. 01**
	With. gr.	53, 501. 19	708	75. 57	
Att. toward school com. (SC)	Total	24, 662. 71	711		
	Among gr.	63. 69	3	21. 23	0. 61
	With. gr.	24, 599. 02	708	34. 74	

* $.01 < P(F) < .05$ ** $P(F) < .01$

Table D-21. Analysis of variance among means on teacher attitudes of groups classified by employment plans for the following years

Attitude Inventory	Source of Variance	Sum of Square	d. f.	Mean Square	F
Subj. Matter preference (SM)	Total	51, 199. 68	711		
	Among gr.	680. 47	5	136. 10	1. 90
	With. gr.	50, 519. 21	706	71. 56	
Minn. Teach. Att. Inven. MTAI	Total	889, 375. 67	710		
	Among gr.	5, 713. 72	5	1142. 74	0. 91
	With. gr.	883. 661. 95	705	1253. 42	
Homemaking Teacher Att. HTAI	Total	129, 637. 24	710		
	Among gr.	1, 730. 77	5	346. 15	1. 91
	With. gr.	127, 906. 47	705	181. 43	
Fam. Interpersonal Relations (F)	Total	83, 881. 61	711		
	Among gr.	470. 79	5	94. 16	0. 79
	With. gr.	83, 410. 82	706	118. 14	
Att. toward profession (P)	Total	50, 909. 63	711		
	Among gr.	265. 96	5	53. 19	0. 74
	With. gr.	50, 643. 67	706	71. 73	
Att. toward community (C)	Total	54, 864. 83	711		
	Among gr.	222. 71	5	44. 54	0. 58
	With. gr.	54, 642. 12	706	77. 40	
Att. toward school com. (SC)	Total	24, 662. 71	711		
	Among gr.	136. 68	5	27. 34	0. 79
	With. gr.	24, 526. 03	706	34. 74	

Table D-22. Analysis of variance among means on teacher attitudes of groups classified according to their relation to their local supervisor as indicated in Table 62

Attitude Inventory	Source of Variance	Sum of Square	d.f.	Mean Square	F
Subj. Matter preference (SM)	Total	51,199.68	711		
	Among gr.	561.42	6	93.57	1.30
	With. gr.	50,638.26	705	71.83	
Minn. Teach. Att. Inven. MTAI	Total	889,375.67	710		
	Among gr.	12,931.77	6	2155.30	1.73
	With. gr.	876,443.90	704	1244.95	
Homemaking Teacher Att. HTAI	Total	129,637.24	710		
	Among gr.	1,504.06	6	250.67	1.38
	With. gr.	128,133.18	704	182.01	
Fam. Interpersonal Relations (F)	Total	83,881.61	711		
	Among gr.	1,210.99	6	201.83	1.72
	With. gr.	82,670.62	705	117.26	
Att. toward profession (P)	Total	50,909.63	711		
	Among gr.	2,158.72	6	359.79	5.20**
	With. gr.	48,750.91	705	69.15	
Att. toward community (C)	Total	54,864.83	711		
	Among gr.	1,147.55	6	191.26	2.51*
	With. gr.	53,717.28	705	76.19	
Att. toward school com. (SC)	Total	24,662.71	711		
	Among gr.	355.79	6	59.30	1.72
	With. gr.	24,306.92	705	34.48	

* $.01 < P(F) < .05$

APPENDIX E

		Page
E-1	Marital status	151
E-2	Professional plans for next year	152
E-3	Time of decision to become a teacher	153
E-4	Liking for teaching as a career	154
E-5	Feeling concerning present teaching positions	155
E-6	Policy of school toward private life of teacher	156
E-7	Teacher responsibilities	157
E-8	Teacher responsibilities	158
E-9	Teaching load: population of district	159
E-10	Teacher responsibility for supervision of student teachers	160
E-11	Teacher responsibility for classes	161
E-12	Teacher responsibility for adult education	162
E-13	Age group preferred by teachers	163
E-14	Total class enrollment	164
E-15	Level of classes taught	165
E-16	Adequacy of space and facilities	166
E-17	Relationship among students	167
E-18	Perception of professional behavior of principal	168
E-19	Professional behavior desired of principal	168
E-20	Perception of professional behavior of state supervisor	169
E-21	Professional behavior desired from state supervisor	170

E-22 Perception of professional behavior of local supervisor 171

E-23 Attendance at short conferences for home economics teachers 172

E-24 Attendance at workshops for home economics teachers 173

E-25 Attendance at conferences for teachers in several fields 174

E-26 Attendance at local faculty conferences 174

E-27 Reason for becoming a teacher 175

E-28 Length of teaching experience 176

E-29 Graduate credits earned 177

E-30 Time elapsed since last college credit was earned 178

E-31 Honors earned by teachers 179

Table E-1. Marital Status (item 57)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	1	28	23.52	33.3	93.8	48.2	22.3	45.5	51.9	47.6
	2	30	25.21	35.4	107.6	52.5	22.2	49.7	50.8	46.2
I	3	51	42.85	35.0	100.4	50.4	22.0	47.3	52.2	46.5
	4	3	2.52	32.0	88.3	48.0	17.3	48.3	58.0	48.0
	5	7	5.88	34.7	108.3	54.3	23.7	50.1	56.3	50.7
	1	47	24.73	34.6	100.5	51.5	21.7	47.3	52.9	48.1
	2	49	25.78	33.6	95.6	48.5	22.9	47.9	53.2	49.0
II	3	76	40.00	36.3	97.5	51.1	23.4	48.6	53.7	48.2
	4	6	3.15	34.2	124.0	61.5	22.0	54.3	59.5	46.8
	5	12	6.31	38.8	118.6	58.6	22.2	52.2	49.5	43.0
	1	40	25.47	33.6	96.1	48.1	21.9	45.6	52.8	48.6
	2	47	29.93	36.8	110.4	57.0	24.3	49.2	54.4	47.3
III	3	56	35.66	37.9	106.5	52.2	23.3	49.6	54.7	46.1
	4	4	2.54	41.5	101.8	56.8	25.5	44.5	56.3	42.8
	5	10	6.36	40.7	117.7	54.3	19.1	53.1	50.5	41.6
	1	37	32.17	36.1	103.6	51.5	22.4	48.7	53.4	48.6
	2	26	22.60	38.7	109.1	53.9	21.4	50.3	49.9	43.5
IV	3	38	33.04	38.2	112.4	55.2	22.1	51.3	51.3	44.9
	4	2	1.73	43.5	88.5	51.0	32.0	40.0	58.5	52.0
	5	12	10.43	37.3	127.8	59.8	24.3	54.1	54.8	49.6
	1,0	47	36.15	36.2	111.4	52.6	21.5	48.8	51.6	44.3
	2	32	24.61	37.5	110.2	50.6	21.6	54.8	50.9	44.2
V	3	38	29.23	37.5	109.1	54.1	21.8	49.9	52.9	45.4
	4	2	1.53	36.5	75.0	42.0	28.5	45.0	66.5	58.5
	5	11	8.46	40.4	137.3	61.9	22.8	53.2	51.7	46.4
	1,0	199	27.99	34.9	101.8	50.6	21.9	47.1	52.5	47.3
	2	184	25.88	36.1	105.8	52.5	22.7	50.1	52.2	46.5
T	3	259	36.43	37.0	103.9	52.2	22.8	49.3	53.4	46.7
	4	17	2.39	36.9	102.5	54.5	23.9	48.2	59.2	48.1
	5	52	7.31	38.6	123.1	58.2	22.4	52.7	52.3	46.0

Table E-2. Professional plans for next year (item 59)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	1	72	60.50	34.1	103.1	52.3	22.2	47.5	52.1	47.0
	2	16	13.44	35.2	87.6	44.3	21.4	46.3	53.4	47.0
I	3	9	7.56	40.6	95.0	53.0	23.1	44.7	55.7	51.3
	4, 6, 8	7	5.88	29.9	120.6	51.3	22.7	44.4	49.9	43.9
	7	15	12.60	35.1	98.3	47.1	21.5	53.1	50.1	45.5
	1	144	75.78	35.7	97.6	50.9	22.8	48.1	52.8	48.2
	2	13	6.84	34.0	101.5	51.4	22.8	52.3	54.0	48.8
II	3	17	8.94	35.6	112.7	53.8	23.1	46.2	55.1	45.7
	5, 6, 8, 9	12	6.31	32.8	110.3	54.6	21.1	53.2	53.3	47.7
	7	4	2.10	30.0	90.5	45.5	25.3	44.5	61.0	48.3
	1	106	67.51	37.1	108.0	54.1	22.8	48.5	53.3	47.1
	2	15	9.55	33.1	99.0	48.3	22.8	44.1	54.5	48.7
III	3	15	9.55	37.0	102.9	53.4	22.5	47.8	55.5	44.1
	5, 6, 8	11	7.00	35.3	83.1	43.4	20.4	49.8	57.9	46.1
	7	10	6.36	39.7	119.3	56.8	29.1	55.4	52.3	45.1
	1	86	74.78	37.8	112.2	54.5	22.4	50.0	52.2	46.1
	2	5	4.34	33.2	107.6	53.4	20.8	53.4	47.8	45.0
IV	3	7	6.08	39.0	117.6	57.9	22.3	53.7	50.7	43.6
	4, 5, 6, 8, 9	12	10.43	36.9	92.1	50.4	24.2	50.1	55.0	51.3
	7	5	4.34	38.0	107.2	51.2	20.0	48.6	50.0	44.6
	1	101	77.69	37.9	114.6	54.5	21.9	51.5	51.5	45.1
	2	4	3.07	26.5	79.0	37.8	22.3	39.0	60.3	43.3
V	3	12	9.23	37.8	97.7	48.0	22.2	50.2	52.7	44.9
	4, 5, 6, 8	7	5.38	34.1	132.9	53.7	15.3	52.4	48.1	42.3
	7	6	4.61	48.5	96.5	50.3	27.5	48.3	58.7	47.2
	1	509	71.59	36.6	106.4	53.1	22.5	49.2	52.6	46.9
	2	53	7.45	33.5	95.5	47.5	22.2	47.2	53.9	47.5
T	3	60	8.44	37.5	105.2	52.9	22.7	48.1	54.3	45.8
	4, 5, 6, 8, 9	49	6.89	34.1	104.4	50.4	21.1	50.3	53.5	46.9
	7	40	5.63	36.3	103.6	50.4	24.5	51.6	53.0	45.8

Table E-3. Time of decision to become a teacher (item 61)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1	20	16.80	33.8	106.9	51.6	24.0	49.0	52.4	46.9
	2	6	5.04	33.7	81.5	45.8	20.0	47.3	58.3	47.5
	3, 9	50	42.01	34.8	100.8	51.2	21.5	46.7	52.8	47.1
	4	12	10.08	32.4	94.6	48.3	21.3	44.5	51.8	49.3
	5	13	10.92	33.8	111.1	52.3	21.5	53.1	48.5	43.8
	6	6	5.04	36.0	109.7	50.5	25.7	43.0	52.5	50.8
	7	7	5.88	41.3	108.1	55.6	21.9	52.4	49.0	42.7
	8	5	4.20	33.8	67.8	39.4	22.8	44.8	52.2	48.6
II	1	46	24.21	35.3	97.1	49.6	23.3	47.3	54.3	47.6
	2	19	10.00	36.6	100.0	51.6	22.7	45.3	54.4	50.1
	3, 9	65	34.21	35.0	99.5	51.1	23.0	49.9	52.1	30.5
	4	18	9.47	33.6	93.8	49.4	21.9	49.2	50.1	47.3
	5	7	3.68	37.4	104.0	59.3	21.6	48.6	61.0	51.0
	6	10	5.26	35.8	105.4	49.7	19.8	51.0	50.3	48.9
	7	9	4.73	33.0	102.7	52.4	20.8	48.6	51.0	45.7
	8	16	8.42	36.6	109.8	55.9	24.5	47.7	57.5	50.8
III	1	36	22.92	32.9	96.1	51.6	22.5	47.1	55.1	47.8
	2	10	6.36	33.4	99.2	48.6	23.8	46.4	53.5	45.4
	3, 9	57	36.30	38.0	106.1	52.2	23.5	49.1	54.3	47.1
	4	10	6.36	41.0	103.9	50.2	20.8	50.5	48.9	43.6
	5	18	11.46	38.0	117.4	58.3	20.8	48.2	53.6	49.3
	6	8	5.09	41.3	106.1	54.4	22.9	47.0	59.5	44.5
	7	7	4.45	35.4	122.9	57.4	30.6	52.1	46.7	43.9
	8	11	7.00	37.7	110.7	53.9	22.3	49.9	54.1	46.8
IV	1	20	17.39	35.4	106.7	54.0	20.8	49.4	51.2	43.8
	2	6	5.21	36.3	95.5	50.8	26.8	47.5	54.0	48.3
	3, 9	38	33.04	38.4	115.9	55.1	22.2	51.2	51.2	47.8
	4	15	13.04	35.7	107.9	54.7	21.8	45.8	55.1	48.9
	5	8	6.95	33.0	116.9	56.3	22.4	53.0	49.6	43.0
	6	7	6.08	40.1	110.4	53.4	20.6	50.4	52.6	46.3
	7	10	8.69	38.6	93.1	49.3	23.0	53.1	54.9	45.8
	8	11	9.56	43.2	116.7	55.3	25.6	52.5	51.2	44.8
V	1	31	23.84	37.8	114.5	51.2	23.2	49.1	52.2	46.0
	2	4	3.07	33.5	126.5	53.8	18.5	56.0	50.0	43.3
	3	39	30.00	36.2	108.8	52.5	22.3	49.2	53.6	46.7
	4	20	15.38	37.8	98.6	53.0	21.5	52.8	51.2	43.3
	5	8	6.15	42.5	115.9	54.5	19.1	55.0	52.8	46.5
	6	11	8.46	35.2	107.6	53.3	18.9	49.4	50.3	40.5
	7	9	6.92	37.4	119.8	56.6	21.6	53.2	48.4	42.3
	8	8	6.15	38.3	138.5	58.8	23.3	55.3	52.8	45.5

Table E-4. Liking for teaching as a career (item 62)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1	34	28.57	35.4	109.2	53.2	23.0	50.4	51.5	45.8
	2	38	31.93	33.5	96.3	47.4	21.9	47.4	50.6	46.3
	3	39	32.77	35.0	102.3	51.8	20.9	46.2	53.6	46.8
	4	8	6.72	34.5	79.9	48.1	25.6	44.8	55.8	55.5
II	1	52	27.36	35.4	103.5	52.1	22.8	47.2	54.0	48.9
	0, 2	80	42.10	35.5	99.4	51.0	22.4	49.0	52.1	45.8
	3	47	24.73	34.3	97.1	51.1	23.7	49.0	54.3	50.2
	4, 5	11	5.78	36.6	99.0	51.1	20.9	49.0	54.5	50.7
III	1	34	21.65	40.0	111.7	55.6	24.1	50.6	51.9	45.7
	2	57	36.30	35.2	107.7	52.5	20.8	49.5	51.9	44.3
	3	57	36.30	36.3	102.5	52.6	23.6	46.8	56.2	49.4
	4	9	5.73	36.8	89.0	46.6	29.4	45.7	59.1	49.8
IV	1	33	28.69	37.9	115.7	56.1	21.6	51.5	52.0	45.8
	0, 2	38	33.04	37.2	118.6	57.1	22.5	51.9	49.9	44.6
	3	39	33.91	37.7	102.0	52.8	22.7	47.8	53.3	47.4
	4	5	4.34	38.0	69.8	42.4	25.2	51.0	60.8	56.0
V	1	41	31.53	39.3	118.7	54.4	23.7	51.7	51.9	45.3
	0, 2	53	40.76	35.8	109.5	52.5	19.2	52.5	49.8	42.4
	3	32	24.61	36.8	108.6	53.8	23.4	47.7	55.3	47.5
	4, 5	4	3.07	39.8	105.5	44.8	25.0	48.0	57.0	55.8
T	1	194	27.29	37.5	111.2	54.1	23.1	50.0	52.4	46.5
	0, 2	266	37.41	35.6	105.5	52.0	21.4	50.2	51.2	44.9
	3	214	30.10	35.9	102.1	52.0	22.9	47.5	54.7	48.4
	4, 5	37	5.20	36.7	89.2	47.5	25.0	47.4	57.0	52.8

Table E-5. Feeling concerning present teaching positions (item 63)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1	37	31.09	35.5	100.4	50.0	22.2	49.6	51.2	47.5
	2	51	42.85	34.4	103.5	50.8	21.9	45.9	52.4	45.8
	3	25	21.00	34.1	102.5	52.6	21.6	49.4	52.8	47.6
	4	6	5.04	32.8	74.3	43.7	25.2	43.3	54.5	51.0
II	1	65	34.21	35.5	100.0	52.7	22.7	47.6	53.5	48.0
	0, 2	87	45.78	35.3	102.9	51.5	22.7	49.7	52.4	46.9
	3	30	15.78	35.9	92.3	48.7	22.8	46.8	54.6	50.9
	4, 5	8	4.21	30.5	95.6	48.6	23.4	48.5	56.0	49.6
III	1	63	40.12	37.6	110.4	55.2	21.8	49.8	52.1	44.7
	2	57	36.30	36.6	107.0	53.0	21.2	49.0	54.2	47.5
	3	29	18.47	35.4	94.4	47.8	23.9	45.3	55.8	49.8
	4, 5	8	5.09	36.1	98.0	52.1	26.8	47.0	59.0	46.9
IV	1	48	41.73	36.3	110.9	54.7	21.9	49.9	52.1	45.3
	0, 2	48	41.73	38.6	109.5	54.1	22.5	51.3	51.1	46.0
	3	16	13.91	39.3	115.2	54.1	23.1	48.6	53.9	50.1
	4, 5	3	2.60	35.0	76.3	44.3	26.0	51.0	61.0	51.0
V	1	64	49.23	39.0	117.0	55.3	22.3	53.2	51.5	43.6
	2	51	39.23	35.9	104.3	51.7	20.6	49.1	51.6	45.6
	3	10	7.69	35.7	118.4	51.2	24.5	46.6	57.1	46.6
	4, 5	5	3.84	32.6	115.8	45.2	23.0	49.8	52.8	52.4
T	1	277	38.96	36.9	108.2	53.8	22.2	50.1	52.1	45.7
	0, 2	294	41.35	36.2	105.1	52.1	22.4	49.2	52.6	46.6
	3	110	15.47	35.8	100.9	50.4	23.0	47.2	54.6	49.4
	4, 5	30	4.22	33.3	93.4	47.6	24.8	47.5	56.5	49.8

Table E-6. Policy of school toward private life of teacher (item 64)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1	41	34.45	32.4	98.4	49.6	23.0	48.0	52.7	47.7
	2	75	63.02	35.7	102.2	51.1	21.8	47.5	52.0	46.8
	3	3	2.52	36.7	101.0	49.3	18.3	47.7	50.3	42.0
II	1	44	23.15	34.0	85.6	45.8	23.8	47.3	53.5	49.2
	x, 0, 2	139	73.15	35.6	103.8	52.8	22.6	48.8	53.1	47.5
	3	7	3.68	36.7	113.3	56.7	19.0	49.6	54.7	49.6
III	1	41	26.11	37.1	109.1	54.1	23.3	49.8	53.5	45.2
	2	113	71.97	36.8	104.1	52.3	23.1	48.3	54.1	47.3
	3	2	1.27	27.5	107.5	57.5	18.0	34.0	50.0	49.0
	4	1	.63	35.0	130.0	60.0	17.0	55.0	53.0	41.0
IV	1	40	34.78	40.1	114.2	55.7	21.3	53.3	53.2	46.4
	x, 0, 2	73	63.47	37.4	107.7	53.5	23.0	48.3	51.7	46.3
	3	2	1.73	34.0	110.0	43.0	24.5	66.0	48.5	51.0
V	1	54	41.53	37.4	120.5	55.4	21.6	52.0	50.6	43.1
	x, 0, 2	74	56.15	37.1	106.2	51.7	22.0	50.0	53.2	46.2
	3	2	1.53	41.5	155.0	73.5	21.5	58.0	47.5	48.5
T	1	220	30.94	36.2	106.1	52.2	22.5	50.1	52.6	46.2
	x, 0, 2	474	66.67	36.2	104.2	52.2	23.0	48.6	53.0	47.0
	3, 4	17	2.39	35.8	115.9	56.1	19.6	50.6	51.8	47.7

Table E-7. Teacher responsibilities (item 19)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	3	11	9.24	36.5	86.3	49.0	19.5	50.5	54.0	50.1
	4	18	15.12	32.1	86.9	46.9	21.7	43.6	53.8	47.9
	5	37	31.09	35.4	107.9	53.6	21.8	47.2	52.8	47.1
	6	34	28.57	34.1	99.0	47.3	22.9	48.0	51.1	45.4
	7, 8	19	15.96	35.1	110.3	54.8	23.2	50.3	50.3	46.7
II	2, 3	2	.52	24.5	84.0	55.5	28.0	42.0	62.0	53.5
	4	25	13.15	33.9	100.3	51.0	21.2	45.2	54.4	48.4
	5	46	24.21	34.7	98.9	50.8	22.3	49.2	52.3	48.2
	6	59	31.05	35.3	101.7	50.6	23.3	50.5	53.3	46.3
	7, 8	58	30.52	36.6	99.3	52.4	24.0	47.5	53.3	49.3
III	2, 3	13	8.28	38.5	104.8	49.4	23.4	49.6	54.1	47.4
	4	25	15.92	34.3	98.8	52.6	22.4	45.2	52.1	50.9
	5	33	21.01	38.8	107.0	52.9	22.3	50.5	53.7	47.6
	6	47	29.93	35.9	103.9	51.9	23.0	48.5	52.6	45.2
	7, 8	39	24.84	36.9	111.1	55.4	23.9	48.8	53.5	45.0
IV	3	7	6.08	37.7	111.0	55.6	26.9	53.4	51.6	48.7
	4	21	18.26	34.9	108.7	53.9	22.7	52.3	55.0	47.9
	5	31	26.95	38.6	114.0	55.1	22.5	49.1	53.4	49.0
	6	29	25.21	38.1	109.9	53.7	20.9	49.9	47.9	44.2
	7, 8	27	23.47	38.0	106.2	53.2	22.6	49.9	53.1	43.9
V	3	12	9.23	37.3	114.3	53.7	23.5	51.2	55.3	46.2
	4	32	24.62	37.4	111.1	54.9	20.9	48.8	51.8	46.4
	5	32	24.62	37.2	107.6	52.4	21.3	51.1	51.9	44.6
	6	28	21.53	40.1	116.3	51.9	21.6	52.7	49.1	42.9
	7, 8	26	20.00	34.5	108.1	50.5	23.1	51.3	53.9	44.7
T	2, 3	45	6.33	36.9	103.4	51.7	23.2	50.5	54.4	48.2
	4	121	17.02	34.8	102.3	52.3	21.7	47.2	54.3	48.2
	5	179	25.17	36.7	106.4	52.8	22.1	49.3	52.8	47.3
	6	197	27.71	36.4	105.0	51.0	22.3	49.8	51.4	45.1
	7, 8	169	23.77	36.4	105.7	53.2	23.5	49.1	53.1	46.5

Table E-8. Teacher responsibilities (item 20)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1, 2	5	4.20	33.4	103.0	45.4	23.8	49.4	52.8	54.6
	3	30	25.21	35.1	93.1	48.3	21.2	48.7	52.9	47.8
	0, 4	32	26.89	33.0	101.9	49.3	22.5	45.7	50.7	44.4
	5	24	20.16	34.0	103.6	51.8	21.8	49.1	51.8	44.5
	6	13	10.92	33.9	107.1	56.2	23.8	45.8	53.9	49.8
	7, 8	15	12.60	39.1	103.5	52.7	21.6	48.5	52.7	49.6
II	1, 2	12	6.31	31.1	99.3	52.2	23.8	41.0	55.7	50.8
	3	39	20.52	34.1	111.2	55.3	22.1	51.0	51.1	46.4
	0, 4	57	30.00	36.5	96.8	50.2	22.5	48.6	52.5	48.3
	5	41	21.57	36.7	97.3	48.8	22.6	48.2	52.8	47.5
	6	23	12.10	35.4	105.0	54.7	23.2	51.0	54.1	46.4
	7, 8	18	9.47	33.1	85.2	47.2	23.9	43.9	59.2	51.9
III	1, 2	7	4.45	35.1	94.0	52.3	24.4	43.3	56.9	51.7
	3	28	17.83	36.0	103.8	51.2	22.8	47.9	54.4	45.9
	0, 4	46	29.29	36.1	107.8	53.7	23.2	50.4	53.6	47.4
	5	47	29.93	36.6	106.5	53.1	21.5	47.5	52.9	45.9
	6	20	12.73	38.4	101.3	52.2	25.1	48.0	55.2	48.6
	7, 8	9	5.73	40.4	114.4	54.9	25.3	52.1	53.8	42.9
IV	1, 2	10	8.69	34.7	96.3	53.4	22.8	52.8	53.1	49.6
	3	23	20.00	39.0	117.3	54.7	22.2	49.8	50.4	46.3
	4	34	29.56	36.2	112.4	55.6	22.8	48.7	53.3	46.7
	5	32	27.82	37.3	106.9	52.8	21.9	51.6	51.5	46.3
	6	10	8.69	42.8	111.2	53.8	24.1	51.7	53.6	45.1
	7, 8	6	5.21	38.2	105.7	51.5	21.0	48.7	51.8	42.3
V	2	9	6.92	35.1	119.9	60.0	22.4	55.0	51.3	43.8
	3	23	17.69	38.5	108.6	48.4	20.4	49.0	52.4	44.3
	4	36	27.69	36.5	107.8	51.0	23.0	50.4	53.6	45.6
	5	37	28.46	38.3	113.1	54.5	20.8	52.3	50.2	44.8
	6	16	12.30	35.1	114.1	56.0	24.4	47.9	52.9	46.2
	7, 8, 9	9	6.92	39.0	119.8	56.3	19.8	53.0	51.3	43.9
T	1, 2	43	6.05	34.5	102.4	53.3	23.9	49.3	55.2	50.7
	3	143	20.11	36.2	106.7	51.8	21.8	49.7	52.2	46.3
	0, 4	205	28.83	35.8	104.5	51.8	22.8	48.8	53.3	46.7
	5	181	25.46	36.8	105.5	52.2	21.7	49.6	51.9	45.9
	6	82	11.53	36.8	107.0	54.5	24.1	48.9	54.0	47.3
	7, 8, 9	57	8.03	37.3	102.2	51.8	22.6	48.3	54.6	47.6

Table E-9. Teaching load: population of district (item 39)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1	9	7.56	35.6	83.7	46.8	24.6	43.8	57.8	49.3
	x, 0, y	17	14.28	34.1	104.4	53.0	23.3	44.9	52.0	44.1
	2	24	20.16	32.1	97.5	47.7	20.5	48.5	49.9	48.6
	3	41	34.45	34.6	100.6	49.6	23.2	47.9	51.2	46.3
	4	16	13.44	34.7	101.9	52.0	21.4	49.6	53.6	47.1
	5	8	6.72	36.8	118.0	59.4	18.9	52.1	52.6	48.5
	7	4	3.36	45.3	108.5	52.3	19.3	45.0	57.0	47.0
II	1	4	2.10	31.8	90.3	45.5	23.0	38.0	55.5	51.3
	x, 0, y	17	8.94	38.4	105.8	52.8	23.2	47.8	52.9	47.8
	2	9	4.73	34.9	96.2	55.7	23.7	51.3	49.4	50.6
	3	32	16.84	33.6	92.2	46.5	21.3	47.2	52.6	47.8
	4	57	30.00	35.9	102.4	50.9	22.7	50.2	54.7	48.5
	5	55	28.94	35.6	101.0	53.0	23.5	47.7	53.1	47.4
	6	14	7.36	33.2	98.6	54.2	22.5	50.0	51.0	46.8
	7	1	.52	29.0	74.0	33.0	18.0	39.0	53.0	39.0
	8	1	.52	31.0	159.0	77.0	21.0	53.0	69.0	53.0
III	1	1	.63	23.0	78.0	50.0	28.0	31.0	56.0	47.0
	x, 0	15	9.55	33.0	103.0	52.5	24.3	49.0	52.8	45.1
	2	3	1.91	40.3	79.7	50.3	23.3	39.0	56.0	54.0
	3	7	4.45	41.9	77.9	42.4	23.9	43.6	60.6	46.4
	4	20	12.73	31.0	95.0	50.3	22.5	45.8	53.1	48.8
	5	47	29.93	39.4	111.8	54.5	21.6	49.7	54.6	47.6
	6	52	33.12	37.1	109.5	53.0	23.4	50.3	52.0	44.7
	7	8	5.09	35.0	111.0	58.5	25.0	47.6	54.6	46.4
	8	4	2.54	39.8	109.8	59.3	26.3	47.0	63.3	54.8
IV	1	1	.86	31.0	66.0	49.0	25.0	51.0	54.0	47.0
	x, 0	12	10.43	34.0	109.8	54.8	23.8	47.5	54.3	48.3
	2	1	.86	26.0	72.0	39.0	25.0	48.0	56.0	39.0
	3	3	2.60	40.3	133.3	67.0	23.3	57.0	61.0	51.0
	4	9	7.82	36.3	99.9	51.0	22.3	45.9	51.3	41.4
	5	18	15.65	38.4	107.2	55.4	22.2	49.9	50.7	47.3
	6	45	39.13	37.0	109.4	52.3	22.3	50.1	51.2	47.1
	7	19	16.52	41.3	114.6	55.1	21.1	54.5	52.3	44.6
	8	7	6.08	39.1	123.7	59.7	24.4	50.0	54.6	46.3
V	2	1	.76	28.0	60.0	37.0	25.0	29.0	48.0	46.0
	x, 0	10	7.69	39.0	117.4	53.2	23.1	52.2	53.7	49.9
	3	7	5.38	40.3	110.0	53.4	23.1	45.4	54.3	42.1
	4	8	6.15	39.6	113.8	54.4	21.6	55.3	47.9	46.8
	5	8	6.15	36.6	122.8	58.6	26.1	47.8	53.0	45.5
	6	17	13.07	36.2	90.6	45.6	21.6	46.5	54.8	48.8
	7	13	10.68	33.9	98.0	49.5	21.0	47.4	51.0	46.5
	8	56	43.07	38.1	118.4	55.9	21.2	53.3	52.1	43.2
	9	10	7.69	34.7	122.5	51.1	21.2	54.1	48.1	41.7

Table E-10. Teacher responsibility for supervision of student teachers (item 40)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	1, 0	99	83.19	33.9	98.8	49.9	22.0	47.3	52.2	47.0
	2	4	3.36	40.0	89.0	42.3	24.8	49.0	55.3	49.3
I	3	3	2.52	34.7	111.7	55.3	22.3	44.3	57.0	48.3
	4	9	7.56	36.1	119.8	59.0	23.0	51.9	51.1	45.3
	5	4	3.36	43.8	111.3	52.8	20.5	49.5	48.5	46.3
	1, 0	131	68.94	35.2	95.5	50.0	22.7	47.5	53.8	48.1
	2	11	5.78	32.5	109.5	57.4	23.5	48.8	54.5	50.9
II	3	28	14.73	36.1	111.1	54.9	22.8	50.7	51.6	46.6
	4	12	6.31	33.1	115.6	54.4	22.6	52.3	50.0	47.6
	5	8	4.21	39.5	96.6	48.3	22.0	50.5	53.8	48.5
	x, 1, 0	92	58.59	35.4	102.2	51.2	22.8	47.8	54.7	47.2
	2	14	8.91	44.1	119.6	54.7	21.3	55.3	50.3	41.8
III	3	17	10.82	40.0	115.1	57.6	23.9	50.8	54.3	46.7
	4	16	10.19	35.2	99.4	51.6	25.1	43.8	55.1	48.4
	5	18	11.46	36.2	108.7	56.8	22.9	49.5	51.2	47.6
	1	52	45.21	36.7	107.1	55.0	23.5	50.0	53.7	48.8
	2	17	14.78	37.9	123.1	55.0	22.1	51.6	51.7	46.7
IV	3	18	15.65	39.5	125.1	58.8	20.2	53.6	48.8	41.4
	4	19	16.52	37.3	106.6	51.1	21.5	50.5	50.7	44.3
	5	9	7.82	39.7	79.1	44.1	23.4	43.4	53.8	46.6
	1, 0	56	43.07	36.4	100.4	50.6	21.9	48.8	52.9	46.0
	2	12	9.23	40.7	116.2	55.5	23.8	51.3	56.3	44.7
V	3	19	14.61	40.8	126.4	55.1	22.0	53.8	49.5	42.0
	4	28	21.53	32.8	116.2	53.6	20.4	52.1	51.4	44.9
	5	15	11.53	41.3	126.2	57.7	22.6	52.5	49.9	45.8
	x, 1, 0	430	60.48	35.3	99.7	50.9	22.6	48.0	53.5	47.0
	2	58	8.16	39.0	115.9	54.6	22.7	51.7	53.1	46.1
T	3	85	11.95	39.1	118.3	56.3	22.5	52.4	51.8	44.9
	4	84	11.81	34.7	111.1	53.4	22.1	50.2	51.7	45.8
	5	54	7.59	39.2	107.1	53.4	22.6	49.5	51.4	46.9

Exper. supv'd of stud't teachers	N	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
None	430	35.3	99.7	50.9	22.6	48.0	53.5	47.0
Supv'd, no prep.	142	36.4	113.0	54.6	22.3	50.8	52.2	45.9
Supv'd, had prep.	139	39.2	113.9	55.1	22.5	51.2	51.6	45.6

Table E-11. Teacher responsibility for classes (item 41)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1	31	26.05	34.9	94.7	48.3	21.5	46.3	51.8	46.4
	2	16	13.44	31.3	87.1	47.2	21.9	45.1	53.1	49.9
	3	6	5.04	39.7	132.2	64.5	19.3	50.0	49.2	44.8
	4	66	55.46	34.8	104.2	31.2	22.7	48.7	52.4	46.7
II	1	22	11.57	32.8	85.9	48.4	23.8	46.3	57.5	48.9
	2	7	3.68	33.9	91.7	50.0	24.4	39.7	55.0	50.9
	3	18	9.47	36.8	98.0	52.8	21.9	50.5	50.4	44.4
	4	143	75.26	35.5	102.7	51.7	22.6	49.0	52.9	48.2
III	1	7	4.45	33.4	97.3	52.0	24.4	42.7	57.4	48.1
	2	5	3.18	43.2	84.4	44.6	26.0	50.2	60.0	52.8
	3	14	8.91	36.4	115.5	53.9	21.5	51.4	51.5	42.9
	0, 4	131	83.43	36.7	105.8	53.1	23.0	48.5	53.3	46.4
IV	1	7	6.08	37.7	117.6	55.1	23.0	48.7	54.9	49.1
	2	1	.86	25.0	82.0	39.0	23.0	55.0	52.0	43.0
	3	11	9.56	36.1	110.1	54.4	22.7	53.3	52.5	42.9
	4	96	83.47	37.9	109.7	54.2	22.4	50.1	51.9	46.6
V	1	11	8.46	35.8	99.5	48.2	22.1	51.0	56.2	54.5
	3	31	16.15	38.8	135.5	61.2	21.4	55.4	49.5	41.0
	4	98	75.38	37.1	108.5	52.0	21.9	49.9	52.1	44.8
T	1	78	10.97	34.6	95.1	49.3	22.6	46.9	54.8	48.5
	2	29	4.08	33.7	87.6	47.1	23.3	44.8	54.7	50.4
	3	70	9.85	38.0	117.5	56.8	21.9	53.3	51.3	43.5
	4	534	75.10	36.4	106.0	46.8	20.5	49.2	52.7	46.8

Table E-12. Teacher responsibility for adult education (item 42)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	0, 1	65	54.62	34.7	101.5	51.0	22.5	47.5	52.8	47.7
	3	27	22.68	34.9	97.8	49.0	22.6	46.3	53.4	47.0
	4	12	10.08	33.0	103.9	52.8	21.8	52.7	49.2	45.6
	2, 5	15	12.60	35.1	100.9	49.8	16.9	47.0	49.7	38.1
II	0, 1	84	44.21	34.5	102.1	52.9	22.5	47.3	54.7	47.2
	3	50	26.31	37.0	100.0	49.9	23.0	48.8	52.6	48.7
	4	22	11.57	33.1	96.6	51.0	22.0	52.4	51.3	46.8
	2, 5	34	17.89	36.1	96.4	49.8	23.4	48.6	52.1	46.9
III	0, 1, x	108	68.78	37.0	102.3	51.5	23.0	48.5	54.9	47.3
	3	23	14.64	37.0	117.2	55.3	21.8	49.6	50.8	46.6
	4	17	10.82	35.5	112.5	55.1	24.9	48.6	52.5	45.3
	2, 5	9	5.73	35.9	102.9	56.1	23.1	46.3	52.3	43.4
IV	0, 1, x	61	53.04	36.8	120.8	58.8	22.8	52.4	51.8	45.7
	3	24	20.86	37.8	99.9	49.3	22.5	47.7	52.2	49.2
	4	19	16.52	38.4	94.9	48.0	21.7	46.6	53.6	47.3
	2, 5	11	9.56	40.3	98.5	49.3	21.5	51.5	51.5	42.5
V	0, 1, x	96	73.84	37.3	106.5	51.3	21.5	50.4	52.0	46.3
	3	11	8.46	38.1	103.3	47.4	22.8	52.8	54.2	43.3
	4	13	10.00	35.3	126.0	56.8	22.5	54.2	48.9	47.3
	2, 5	10	7.69	38.1	101.9	51.7	22.6	49.6	53.5	50.0
T	0, 1, x	414	58.23	36.3	107.2	53.3	22.5	49.2	53.5	46.8
	3	135	18.99	36.8	102.7	50.3	22.6	48.6	52.5	47.6
	4	83	11.67	35.1	105.1	52.3	22.6	50.6	51.4	46.5
	2, 5	79	11.11	36.7	99.0	50.7	22.4	48.6	51.8	45.9

Table E-15. Age group preferred by teachers (item 43)

SS	Item Resp	CC	%	Sm	MTAI	NTAI	SCom	Fam	Prof	Com
	1, 2	3	2.52	35.7	62.0	36.0	24.7	34.7	54.0	59.7
	3	17	14.29	29.8	101.0	49.5	20.4	44.7	50.9	47.3
I	4	45	37.81	34.8	108.8	53.2	20.7	50.6	51.8	45.5
	5	48	40.33	36.6	98.4	49.6	24.0	46.2	53.0	47.0
	6	6	5.04	29.7	79.3	49.2	21.7	47.2	51.3	50.7
	1, 2	2	1.05	45.5	81.0	47.0	21.0	37.5	47.5	44.0
	3	36	18.94	34.6	94.1	47.3	23.0	44.6	56.2	50.3
II	4	73	38.42	35.8	100.5	52.3	22.0	49.7	52.6	47.3
	5	68	35.78	34.8	103.3	53.0	23.4	49.6	51.9	47.3
	6	11	5.78	37.8	97.3	48.1	23.0	48.8	50.0	50.6
	1	2	1.27	33.5	103.5	52.5	20.0	44.0	53.0	56.0
	3	40	25.47	36.1	106.8	51.8	22.7	50.1	54.6	46.6
III	4	58	36.94	37.1	103.6	53.0	23.0	48.6	54.6	47.3
	5	50	31.84	36.0	110.2	54.2	23.3	47.3	52.0	43.5
	6	7	4.45	37.6	96.1	48.7	24.3	45.1	57.9	47.1
	1	2	1.73	29.5	119.5	61.5	21.0	35.5	48.5	39.0
	3	18	15.65	33.1	103.0	48.1	24.5	48.9	52.5	51.1
IV	4, 0	58	50.43	37.8	111.9	53.0	22.2	49.6	52.0	45.7
	5	30	26.08	37.8	112.8	54.9	21.1	50.8	50.0	43.8
	6	7	6.08	41.1	97.7	53.0	23.7	54.7	36.6	49.1
	2	2	1.53	38.5	63.5	43.0	28.5	28.0	62.5	62.5
	3	26	20.00	36.8	104.8	48.9	21.2	46.4	53.7	45.2
V	4	63	48.46	37.6	118.5	56.3	22.7	52.8	51.6	43.0
	5	30	23.07	37.9	112.4	54.6	20.0	51.7	50.0	44.7
	6	9	6.92	34.0	97.2	41.2	22.1	50.3	53.8	46.9
	1, 2	11	1.55	38.6	84.5	46.3	23.2	35.8	53.7	52.9
	3	137	19.27	34.9	101.2	49.3	22.4	47.7	54.1	47.6
T	4, 0	297	41.77	36.8	108.4	53.8	22.3	49.9	52.1	45.6
	5	226	31.78	36.3	106.3	53.3	22.7	48.0	51.6	46.0
	6	40	5.63	36.3	94.3	47.7	23.0	50.0	53.7	48.9

Table E-14. Total class enrollment (item 44)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	1, 2	33	27.73	33.2	109.9	55.1	20.9	47.9	50.8	65.2
	3	44	36.97	34.4	93.1	45.5	22.0	46.2	52.3	67.7
I	4	22	18.49	33.3	106.7	52.7	21.4	48.7	52.4	67.6
	5	14	11.76	35.4	91.4	50.0	24.0	48.1	53.4	66.4
	6	6	5.04	37.3	100.0	52.8	21.7	51.8	55.0	58.2
	1, 2	23	11.11	32.2	98.1	48.4	21.2	47.9	54.6	68.3
	3	48	27.26	34.8	102.9	42.5	22.4	49.6	52.9	68.3
II	4	72	28.94	37.2	93.2	49.5	21.7	50.4	52.5	66.4
	0, 5	46	24.21	35.3	102.6	52.8	23.3	46.9	52.9	65.1
	6	16	8.42	31.8	102.4	53.6	25.1	46.4	56.3	67.9
	1, 2	6	3.82	32.2	99.7	49.2	24.3	47.3	59.3	67.3
	3	24	15.28	33.0	97.7	49.3	23.3	46.6	50.3	67.0
III	4	48	30.57	36.6	117.2	53.0	22.4	45.6	54.2	66.3
	5	40	25.47	36.4	107.6	52.1	23.2	48.9	53.4	65.3
	6	39	24.84	39.1	109.4	55.3	23.3	48.2	55.3	68.3
	1, 2	8	3.47	39.3	103.7	56.0	24.5	44.0	41.3	52.0
	3	19	16.52	36.9	92.6	49.9	23.7	50.3	51.6	67.1
IV	4	36	31.30	36.9	117.3	56.4	20.2	50.7	50.4	66.9
	0, 5	39	33.04	37.1	100.6	50.3	23.0	47.1	53.4	66.0
	6	17	14.79	39.1	118.0	57.3	22.3	56.2	49.8	63.3
	1	2	1.53	31.0	124.3	62.3	27.0	54.0	54.0	64.3
	3	7	5.38	32.3	103.7	40.9	21.3	51.0	59.1	64.3
V	4	32	24.62	37.4	113.9	54.2	23.1	50.3	52.4	66.3
	5	51	39.23	38.7	108.4	50.9	22.7	51.0	52.7	66.2
	6	35	26.92	35.0	115.1	56.3	19.7	51.1	50.0	63.9
	1, 2	70	9.02	31.0	104.9	52.9	21.0	47.8	53.6	66.9
	3	142	18.30	33.3	97.7	48.9	23.0	48.6	49.1	67.9
T	4	196	25.27	36.6	108.9	52.9	21.8	50.1	52.3	66.0
	0, 5	200	25.72	37.3	101.3	51.8	23.1	48.8	53.2	67.1
	6	113	15.88	37.4	112.6	56.2	22.2	50.0	52.9	66.3

Table E-15. Level of classes taught (item 45)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1	2	1.68	38.5	96.0	48.5	21.0	48.5	54.5	47.5
	2	32	26.89	35.4	105.8	51.9	20.8	48.3	50.6	44.8
	3	85	71.42	34.2	99.1	50.1	22.7	47.4	52.7	47.8
II	1	5	2.63	40.0	113.8	54.8	25.6	54.6	51.2	47.4
	2	72	37.89	34.9	102.2	52.2	21.2	50.3	52.5	46.2
	3	113	59.47	35.2	91.8	50.6	23.8	47.1	53.9	49.2
III	1	33	21.01	36.4	105.8	54.8	22.3	50.1	54.2	46.3
	2	62	39.49	36.0	106.2	52.0	24.4	48.4	53.6	47.3
	0, 3, 9	62	39.49	37.7	104.9	50.4	22.1	47.9	54.0	46.6
IV	1	26	22.60	37.2	107.9	51.2	22.4	50.1	51.7	47.2
	2	60	52.17	37.9	110.8	54.9	22.1	50.2	52.1	45.1
	3	29	25.21	37.4	110.3	50.1	23.1	50.9	52.8	48.2
V	1	42	32.30	36.7	96.9	49.6	23.6	47.4	53.9	45.2
	2	63	48.46	37.9	121.5	55.1	21.1	53.5	50.8	43.7
	3	25	19.23	36.3	113.7	54.6	22.8	50.3	51.9	47.9
T	1	108	15.19	36.9	103.0	51.7	22.5	49.3	53.3	46.2
	2	289	40.65	36.6	109.4	53.3	22.1	50.5	52.2	45.7
	0, 3, 9	314	44.16	35.7	102.0	51.6	22.9	47.9	53.3	48.1

Table E-16. Adequacy of space and facilities (item 46)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	1	31	26.05	34.1	101.6	51.4	21.9	49.3	52.7	45.6
	2	59	49.57	36.9	103.4	50.6	21.3	47.8	51.3	46.4
I	3	19	15.96	30.9	98.7	48.6	22.9	45.7	50.7	46.4
	4	10	8.40	29.6	87.6	51.2	26.0	45.8	58.4	55.5
	1	70	36.84	35.0	105.5	53.1	22.1	49.2	51.6	46.9
	2	68	35.78	35.5	93.2	49.4	22.9	48.8	54.5	49.3
II	3	46	24.21	35.6	103.2	52.7	23.0	47.4	53.6	47.4
	4	6	3.15	33.2	85.7	42.3	25.8	43.3	56.2	50.7
	1	77	49.04	36.8	111.2	54.8	22.2	49.7	52.5	45.1
	2	44	28.02	35.6	100.6	50.9	23.9	47.0	56.8	48.8
III	3	30	19.10	37.8	101.4	51.1	24.0	48.1	53.6	47.6
	4	6	3.82	39.0	91.0	50.7	22.8	47.7	52.8	49.3
	1	49	42.60	37.1	113.4	55.7	22.6	51.8	51.4	46.1
	2	41	35.65	39.1	101.0	50.1	23.0	47.2	53.8	47.9
IV	3	21	18.26	38.1	118.5	57.7	20.6	53.6	51.8	44.1
	4	4	3.47	28.0	116.0	56.8	25.3	48.8	46.5	46.0
	1	71	54.61	36.9	113.2	54.2	21.9	48.8	52.2	45.0
	2	39	30.00	37.3	105.8	51.0	22.0	53.3	50.8	44.5
V	3	12	9.23	38.1	121.0	53.0	21.7	54.7	55.2	44.0
	4	8	6.15	39.3	118.6	55.1	20.4	53.0	51.3	48.3
	1	298	41.92	36.3	109.7	54.1	22.2	49.8	52.2	45.9
	2	251	35.30	36.7	100.1	50.3	22.6	48.7	53.5	47.5
T	3	128	18.00	36.1	106.3	52.6	22.7	49.0	53.0	45.4
	4	34	4.78	33.7	98.5	51.1	24.0	48.1	53.9	50.8

Table E-17. Relationship among students (item 60)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	1	24	20.16	33.4	104.3	49.5	24.9	48.3	53.9	48.9
	2	75	63.02	34.8	104.5	52.6	21.2	48.7	50.7	45.0
I	3	12	10.08	38.8	79.8	44.2	22.0	46.5	55.5	51.2
	4	8	6.72	29.8	88.1	44.3	22.8	38.1	55.8	52.9
	1	48	25.26	35.8	109.6	55.0	22.5	48.2	54.5	48.2
	0, 2	121	63.68	35.3	97.7	50.1	22.7	49.1	52.6	47.5
II	3	19	10.00	34.4	88.9	48.9	23.7	48.4	54.3	50.9
	4	2	1.05	28.5	104.5	59.0	20.5	44.0	60.0	48.0
	1	47	29.93	37.9	112.1	53.3	22.4	47.7	53.3	45.8
	2	88	56.05	36.8	103.4	53.0	22.4	49.2	53.3	46.0
III	3	21	13.37	34.4	102.8	52.5	27.2	48.1	57.5	51.7
	4	1	.63	31.0	53.0	28.0	18.0	41.0	60.0	48.0
	1	37	32.17	37.6	116.2	57.0	21.8	51.1	53.1	45.6
	2	61	53.04	37.0	108.7	53.6	22.1	51.0	51.1	45.3
IV	3	14	12.17	40.6	106.9	52.1	24.7	46.3	54.7	51.3
	4	3	2.60	35.3	73.3	38.3	26.7	45.7	49.7	54.3
	1	47	36.15	37.5	119.3	55.6	22.0	51.0	52.1	43.2
V	0, 2	75	57.69	37.2	109.7	51.7	21.6	50.8	51.6	45.6
	3	8	6.15	36.6	92.1	52.6	23.1	51.0	58.9	46.0
	1	203	28.55	36.7	113.0	54.4	22.3	49.3	53.3	46.1
	0, 2	420	59.07	36.2	103.8	52.0	22.1	49.6	52.1	46.3
T	3	74	10.41	36.5	95.1	50.2	24.1	48.0	55.6	50.7
	4	14	1.97	30.9	85.2	45.9	22.9	40.8	55.4	52.1

Table E-18. Perception of professional behavior of principal (item 47)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1	1	.84	33.0	116.0	53.0	12.0	55.0	48.0	45.0
	2	34	28.57	34.5	104.9	51.2	22.0	50.6	50.5	44.0
	3	17	14.28	33.1	80.7	44.9	23.7	43.2	56.4	52.5
	4	67	56.30	35.1	103.6	51.6	21.9	47.2	52.0	46.7
II	1	3	1.57	37.7	94.4	49.7	25.7	48.3	40.7	46.7
	2	53	27.89	34.5	103.7	53.0	22.0	49.6	52.6	46.5
	3	26	13.68	34.5	101.7	52.0	23.2	49.0	54.2	49.4
	4	108	56.84	35.8	97.8	50.4	22.9	47.8	53.8	48.5
III	1	1	.63	34.0	110.0	52.0	27.0	55.0	52.0	51.0
	2	42	26.75	39.7	110.4	53.5	21.6	51.3	52.0	43.6
	3	27	17.19	38.4	108.1	53.9	27.3	48.3	51.6	48.6
	0, 4	87	55.41	34.8	102.4	52.3	22.1	46.5	53.7	47.1
IV	1	2	1.73	40.0	73.5	47.0	27.5	49.0	65.5	55.0
	2	30	26.08	36.2	113.1	55.8	22.4	49.6	51.1	45.1
	3	11	9.56	40.2	110.1	53.4	23.0	49.3	54.3	50.3
	4	72	62.60	37.8	109.7	53.7	22.2	50.9	51.9	46.4
V	1	2	1.53	44.0	60.5	38.5	17.5	56.0	46.5	45.5
	2	36	27.69	37.4	117.1	53.8	20.6	53.6	48.4	42.6
	3	23	17.69	36.2	113.3	53.3	23.0	50.7	53.4	45.5
	0, 4	69	53.07	37.3	109.0	52.4	22.2	49.5	53.6	46.0
T	1	9	1.27	38.7	86.3	47.2	22.9	51.7	49.6	48.6
	2	195	27.43	36.4	109.3	53.4	21.7	50.9	51.1	44.6
	3	104	14.63	35.3	103.4	51.8	24.3	48.3	54.7	48.7
	0, 4	403	56.67	36.2	104.1	52.1	22.4	48.3	53.4	47.3

Table E-19. Professional behavior desired of principal (item 48)

Principal	N	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
Tell me what to do.	2	45.0	100.0	48.5	23.5	47.0	56.0	53.0
Help me work our problems	303	36.2	107.1	52.6	21.4	49.2	52.1	48.0
Leave me alone	11	36.7	112.0	54.5	23.6	50.5	54.8	49.1
Give suggestions as I ask for them	395	36.3	103.6	52.0	22.6	49.1	53.4	47.4

Table E-20. Perception of professional behavior of state supervisor (item 50)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1	3	2.52	46.7	76.3	39.7	25.0	43.0	58.7	52.7
	2	36	30.25	33.9	105.9	52.5	20.6	49.4	49.1	44.7
	3	39	32.77	34.1	101.2	50.9	22.9	46.1	51.9	46.3
	4	6	5.04	33.7	92.7	47.5	19.7	47.3	51.2	44.0
	5	19	15.96	35.7	104.4	50.3	23.1	46.5	53.3	50.2
	6	9	7.56	34.6	96.2	47.3	24.7	48.6	58.8	49.0
	7	7	5.88	34.3	86.9	50.7	20.7	51.9	55.7	50.9
II	1	9	4.73	35.9	83.1	45.0	26.0	48.3	64.0	53.9
	0, 2	64	33.68	37.3	103.3	52.1	22.3	49.9	51.7	48.0
	3	62	32.63	35.3	99.3	50.9	23.1	47.0	50.6	45.4
	4	16	8.42	34.9	113.6	56.6	23.8	49.9	54.6	49.8
	5	26	13.68	32.9	88.7	46.8	23.3	48.6	57.9	50.7
	6	8	4.21	29.3	110.8	60.1	23.5	50.8	54.0	49.4
	7	5	2.63	31.8	91.6	50.6	22.8	41.4	57.6	48.8
III	1	7	4.45	34.7	107.0	49.4	21.2	45.6	56.4	47.9
	0, 2	44	28.02	36.9	108.4	52.4	22.3	49.7	50.4	45.2
	3	25	15.92	37.3	98.0	48.7	23.1	47.4	53.3	45.2
	4	19	12.10	37.0	116.0	59.4	24.8	52.0	55.9	47.9
	5	33	21.01	37.8	108.9	54.8	23.8	48.5	53.8	45.4
	6	15	9.55	35.7	99.7	55.3	21.7	44.1	60.9	50.7
	7	14	8.91	34.5	92.1	47.4	23.6	48.7	54.8	51.0
IV	1	3	2.60	38.3	90.7	47.3	19.0	60.3	58.3	47.7
	2	33	28.69	37.1	109.4	53.6	21.2	50.3	51.1	47.8
	3	24	20.86	36.3	109.6	53.8	22.5	49.0	49.0	44.8
	4	15	13.04	39.3	110.7	54.7	21.3	50.1	51.9	43.6
	5	24	20.86	38.0	104.5	52.8	24.3	48.7	54.3	46.8
	6	11	9.56	35.1	124.0	58.1	23.9	55.0	54.8	47.4
	7	5	4.34	40.0	121.6	58.6	22.6	49.8	55.0	48.2
V	2	27	20.76	36.1	118.8	53.9	21.6	49.3	53.0	45.6
	3	19	14.61	37.9	131.7	60.0	20.9	54.5	52.6	45.3
	4	11	8.46	37.8	121.5	49.9	18.4	57.1	45.6	41.9
	5	48	36.92	37.8	100.8	49.9	23.4	48.4	52.6	46.9
	6	6	4.61	39.5	102.5	55.3	21.8	53.3	51.0	44.0
	7	19	14.61	35.9	128.3	53.3	20.9	51.8	52.6	41.1

Table E-21. Professional behavior desired from state supervisor (item 51)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	1	1	.84	31.0	110.0	58.0	20.0	51.0	58.0	48.0
	2	48	40.33	33.1	104.9	51.3	21.8	49.6	51.0	45.6
I	0, 3	57	47.89	35.9	100.7	50.5	22.4	46.3	52.4	47.5
	4	7	5.88	36.0	98.4	49.6	19.0	47.6	50.7	43.6
	5, 7	6	5.04	32.7	70.7	45.0	26.0	45.2	60.7	55.7
	1	5	2.63	35.4	76.8	45.4	25.2	43.6	61.6	46.0
	2	73	38.42	35.6	103.5	52.6	22.7	50.1	53.0	47.8
II	0, 3	94	49.47	35.2	97.3	50.4	22.5	47.7	52.9	47.9
	4	13	6.84	35.0	105.8	51.2	23.9	47.5	51.8	49.5
	5, 7	5	2.63	32.2	104.8	55.8	22.2	47.8	61.6	50.2
	1	2	1.27	47.5	69.5	46.0	22.0	56.0	64.0	50.5
	2	46	29.29	37.1	103.6	53.2	22.5	47.9	54.9	46.5
III	0, e, 3	79	50.31	35.8	105.9	51.8	22.8	48.3	52.9	46.9
	4	16	10.19	37.1	117.3	60.1	20.9	50.7	53.7	46.3
	5, 6, 7	14	8.91	39.2	102.2	50.4	21.5	48.4	54.9	46.9
	2	31	26.95	37.7	108.4	53.9	21.4	49.8	52.3	46.8
	0, 3	63	54.78	37.2	110.6	53.2	23.3	49.5	51.3	46.9
IV	4	9	7.82	40.8	117.6	55.1	19.4	52.8	49.3	40.1
	5, 6, 7	12	10.43	37.3	115.8	58.8	22.5	54.5	58.4	47.3
	2	30	23.07	39.0	106.8	53.0	22.9	50.1	53.9	47.4
	0, e, 3	54	41.53	36.3	118.7	55.7	21.6	49.6	52.1	43.9
V	4	10	7.69	38.6	124.2	53.8	19.7	57.2	45.9	40.6
	5, 6, 7	36	27.69	36.0	103.2	49.2	21.8	51.9	52.1	45.8
	1	8	1.12	37.9	79.1	47.1	23.8	47.6	61.8	47.4
	2	228	32.07	36.3	104.9	52.7	22.4	49.7	53.2	47.1
T	0, e, 3	347	48.80	36.0	105.2	52.1	22.6	48.2	52.4	46.8
	4	55	7.74	37.3	113.5	54.7	22.7	51.1	50.7	44.7
	5, 6, 7	73	10.27	36.7	102.9	51.1	22.2	50.8	55.0	47.3

Table E-22. Perception of professional behavior of local supervisor (item 52)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	1	4	3.36	31.5	82.3	41.5	19.8	46.0	52.8	48.5
	0, x, 2, y	33	27.72	35.1	107.5	51.6	21.7	46.1	52.5	46.9
I	3	12	10.08	35.0	84.8	44.5	21.1	45.3	52.9	44.6
	4	2	1.68	26.0	97.0	48.0	15.5	55.0	47.0	42.5
	5, 6	12	10.08	31.3	106.3	55.4	24.0	47.1	59.6	51.6
	7	56	47.05	35.5	100.7	50.9	22.6	49.1	50.4	46.5
	1	4	2.10	29.5	107.5	50.3	24.3	51.5	58.0	49.5
	0, x, 2	60	31.57	36.5	108.8	53.5	22.7	47.5	53.1	48.2
II	3	19	10.00	34.9	93.7	47.2	23.5	47.6	53.2	46.4
	4	8	4.21	33.8	100.1	52.4	25.1	48.0	55.3	47.0
	5, 6	12	6.31	34.0	82.5	46.6	25.8	50.4	58.7	48.9
	7	87	45.78	35.1	97.2	50.9	21.9	49.1	52.3	48.1
	1	7	4.45	35.4	91.7	48.1	23.4	43.0	54.9	48.9
	0, x, 2, y	35	22.29	38.5	103.0	50.7	22.1	49.0	52.9	45.9
	3	11	7.00	37.6	116.4	56.5	20.5	49.1	50.0	43.3
III	4	3	1.91	35.7	109.7	61.3	24.0	42.0	53.3	58.7
	5, 6	25	15.92	36.0	106.8	57.0	25.3	45.8	58.1	47.4
	7	76	48.41	36.3	105.0	52.1	22.6	49.9	53.5	46.1
	1	3	2.60	40.0	80.0	47.0	27.0	34.3	63.0	52.3
	0, x, 2	32	27.82	36.7	113.8	54.8	22.7	51.2	50.7	45.4
	3	8	6.95	37.9	99.0	51.3	23.6	42.5	51.1	43.9
IV	4	6	5.21	38.7	106.0	52.8	19.7	50.2	54.5	41.8
	5, 6	10	8.69	34.2	93.0	49.1	24.8	52.0	58.9	52.2
	7	56	48.69	38.5	114.3	55.5	21.8	51.6	51.1	46.2
	1	6	4.61	30.2	98.5	50.8	21.5	46.7	53.3	45.5
	0, x, 2	49	37.69	37.8	109.6	52.7	21.4	53.0	51.9	43.4
	3	30	23.07	37.5	111.8	54.1	21.6	50.0	51.0	44.9
V	4	13	10.00	39.3	134.5	60.2	22.8	51.3	51.2	43.4
	5, 6	16	12.30	37.4	104.4	47.4	21.8	48.0	52.4	45.9
	7	16	12.30	35.9	114.4	53.6	22.9	50.6	54.1	49.1
	1	24	3.38	33.0	93.0	49.4	22.9	44.8	55.7	48.5
	0, x, 2, y	209	29.40	37.1	111.6	52.7	22.4	49.6	52.6	46.3
	3	80	11.25	36.6	102.8	51.0	22.0	47.8	51.7	45.1
T	4	32	4.50	36.6	115.9	56.2	22.5	49.6	52.8	45.4
	5, 6	75	10.55	35.0	100.6	52.0	24.3	48.1	57.3	49.5
	7	291	40.92	36.2	104.4	52.3	22.3	49.9	52.1	47.0

Table E-23. Attendance at short conferences for home economics teachers (item 28)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	0, 1, x, 4	24	20.16	33.4	97.7	51.9	23.4	45.2	55.8	49.3
I	2	56	47.05	34.2	103.3	50.8	21.1	48.9	50.1	45.5
	3	39	32.77	35.9	99.3	49.4	22.7	47.4	52.9	47.6
	0, 1, x, 4	35	18.42	34.5	87.9	47.5	22.3	48.2	55.3	48.4
II	2	72	37.89	34.3	105.7	52.6	21.9	47.8	52.2	47.9
	3	83	43.68	36.4	99.9	51.9	23.6	49.2	53.4	47.9
	0, 1, x	29	18.47	35.1	95.4	49.8	23.5	46.7	57.6	49.6
III	2	59	37.57	38.2	109.0	53.1	21.9	49.2	52.9	45.7
	3	69	43.94	36.2	106.9	54.0	23.8	48.7	53.1	46.4
	0, 1, x	14	11.40	38.2	114.5	54.0	24.4	52.7	54.1	48.3
IV	2	50	43.85	36.5	108.2	53.0	23.4	50.0	52.4	49.0
	3	51	44.73	38.9	110.9	55.3	21.2	50.0	51.2	43.5
	0, 1, x, 4	19	13.95	37.2	114.6	53.7	24.7	47.7	55.0	48.4
V	2	54	41.86	37.2	106.3	51.9	20.9	51.2	52.1	44.8
	3	57	44.18	37.5	116.4	53.9	21.8	51.8	50.9	43.8
	0, 1, x, 4	121	17.02	35.1	98.9	50.7	23.3	47.7	55.8	48.9
T	2	291	40.93	36.0	106.4	52.3	21.8	49.3	52.0	46.6
	3	299	42.05	36.9	106.5	53.0	22.6	49.5	52.4	46.0

Table E-24. Attendance at workshops for home economics teachers (item 29)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	0, 1, x	87	73.10	33.6	103.6	52.5	22.7	49.4	52.4	47.6
	2	11	9.24	37.1	93.4	51.3	21.1	48.7	54.1	47.3
	3	21	17.64	37.6	101.7	50.4	20.5	48.1	50.2	44.2
II	0, 1, x	131	68.94	34.8	99.6	51.9	22.6	48.1	53.1	48.3
	2	17	8.94	33.8	100.1	48.4	21.7	48.8	55.1	49.8
	3	42	22.10	37.4	100.6	50.7	23.5	49.8	53.0	46.5
III	0, 1, x	115	73.24	37.3	104.3	52.2	22.9	47.9	54.5	47.5
	2	11	7.00	34.5	106.8	52.0	26.2	48.4	54.6	42.4
	3	31	19.74	35.5	110.2	55.5	22.3	50.9	51.5	45.4
IV	0, 1, x	73	63.47	37.1	111.8	55.1	22.8	50.6	52.6	47.1
	2	13	11.30	39.3	102.2	47.8	22.8	48.8	54.0	50.6
	3	29	25.21	38.2	109.1	54.4	22.4	50.4	50.2	42.7
V	0, 1, x	83	63.84	37.7	111.1	53.2	22.1	51.6	51.9	44.8
	2	18	13.84	35.9	107.4	54.1	23.6	49.1	54.3	46.4
	3	29	22.30	36.8	117.7	52.4	19.8	50.3	51.0	44.7
T	0, 1, x	489	68.78	34.6	104.8	46.3	22.7	49.0	53.1	47.3
	2	70	9.84	36.0	102.4	50.8	23.0	48.8	54.5	47.5
	3	152	21.38	37.1	107.6	52.7	21.7	50.0	51.4	44.9

Table E-25. Attendance at conferences for teachers in several fields (item 30)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	0, 1, x	48	40.33	33.5	99.9	50.1	23.7	45.5	52.6	48.7
I	2	54	45.37	35.0	100.4	50.6	20.4	49.3	51.0	45.9
	3	17	14.28	36.4	105.1	51.7	22.9	48.8	54.6	45.2
	0, 1, x	81	42.63	35.4	101.2	51.9	21.9	49.5	52.4	47.6
II	2	82	43.15	34.5	95.2	50.1	22.8	47.4	53.2	47.6
	3	27	14.21	37.1	110.2	53.5	24.8	48.9	55.9	50.4
	0, 1, x	64	40.76	36.1	101.9	51.9	22.0	48.2	54.4	47.6
III	2	66	42.03	38.0	108.1	53.1	23.5	49.4	52.9	46.5
	3	27	17.19	35.1	108.1	54.3	24.1	47.4	55.0	45.3
	0, 1, x	37	32.17	36.7	110.8	54.1	21.9	51.7	53.1	47.4
IV	2	61	53.04	37.8	110.8	54.3	23.2	48.7	51.8	47.0
	3	17	14.78	39.1	105.6	53.4	20.8	53.4	51.6	41.9
	0, 1, x	55	42.30	37.1	106.8	52.6	21.9	49.9	51.9	45.8
V	2	58	44.61	37.2	112.8	52.6	22.4	50.5	52.8	45.2
	3	17	13.07	38.1	126.6	56.9	19.4	55.6	49.8	41.7
	0, 1, x	285	40.08	35.9	103.5	52.0	22.3	49.1	53.1	47.6
T	2	321	45.15	36.4	104.9	52.1	22.6	48.9	52.4	46.5
	3	105	14.77	37.0	110.7	54.0	22.8	50.3	53.8	45.5

Table E-26. Attendance at local faculty conferences (item 31)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	0, 1	40	33.61	33.9	103.1	51.4	21.1	47.7	50.6	45.1
I	2	42	35.29	36.7	94.5	48.3	21.9	47.9	52.1	48.1
	3	37	31.09	32.9	105.6	52.2	23.4	47.4	54.0	47.7
	0, 1, x	51	26.84	37.0	103.1	52.9	22.3	49.1	52.1	48.6
II	2	79	41.57	33.6	97.2	50.9	22.5	47.8	52.9	47.6
	3	60	31.57	36.0	100.8	50.5	23.5	48.9	54.8	48.1
	0, 1, x	39	24.84	36.3	105.6	52.5	22.8	47.7	54.0	46.4
III	2	64	40.76	37.4	107.0	53.2	23.6	48.2	54.3	47.2
	3	54	34.39	36.3	103.9	52.8	22.5	49.6	53.3	46.5
	0, 1, x, 4, 5	24	20.86	35.3	116.0	56.4	24.3	47.3	53.9	47.1
IV	2	53	47.08	38.0	107.0	54.0	22.5	50.5	52.2	46.9
	3	38	33.04	38.5	110.4	52.7	21.1	51.9	51.1	45.1
	0, 1, x	36	27.69	38.4	106.9	55.7	21.5	52.0	52.3	47.1
V	2	60	46.15	36.6	108.5	50.5	22.5	49.3	53.3	44.0
	3	34	26.15	37.1	123.8	55.2	20.9	52.6	49.6	44.5
	0, 1, x, 4, 5	190	26.72	36.3	106.0	53.5	22.2	48.8	52.4	46.9
T	2	298	41.91	36.2	102.9	51.5	22.7	48.7	53.0	46.7
	3	223	31.37	36.3	107.5	52.4	22.5	50.1	53.1	46.8

Table E-27. Reason for becoming a teacher (Item 49)

SS	Item Resp	CC	%	Sm	MTAI	NTAI	SCom	Fam	Prof	Com
I	1	18	15.12	35.8	111.8	52.7	20.7	49.3	51.7	46.7
	0, 2	40	33.61	35.7	101.0	50.3	22.9	48.1	52.2	46.9
	5	13	10.92	34.2	87.3	45.5	22.5	43.7	53.6	49.3
	6	21	17.64	34.2	112.8	54.1	19.6	51.8	50.4	43.4
	7	10	8.40	29.2	98.0	50.6	23.0	44.2	52.1	45.3
	3, 4, 8	17	14.28	34.8	86.3	48.4	24.2	45.0	53.9	51.1
II	1	49	25.78	34.8	101.8	53.1	22.0	46.6	53.2	47.8
	2	97	51.05	36.1	104.7	52.4	22.3	49.3	52.6	47.7
	5	24	12.63	37.2	85.3	46.4	24.1	47.1	53.5	49.4
	6	18	9.47	35.4	111.1	55.1	22.7	51.2	52.4	45.9
	7	23	12.10	33.2	92.6	47.7	22.6	52.5	52.8	46.3
	3, 4, 8	17	8.94	33.5	96.6	50.3	24.8	44.8	57.2	52.4
III	1	27	17.19	39.2	118.6	57.4	20.6	52.2	51.6	42.4
	2	46	29.29	35.2	95.2	47.7	24.7	48.0	54.1	46.5
	5	16	10.19	36.9	105.0	53.0	23.8	50.6	55.4	46.1
	6	19	12.10	37.3	112.8	55.8	22.6	47.2	53.4	46.8
	7	31	19.74	36.3	106.7	53.7	22.8	47.6	54.0	48.6
	3, 4, 8	18	11.46	37.1	103.9	54.6	22.7	45.7	55.9	51.2
IV	1	14	12.17	35.1	112.2	54.9	22.1	52.6	47.3	46.5
	0, 2	48	41.73	38.4	111.2	55.3	21.6	50.8	53.6	46.8
	3, 4	8	6.95	35.5	75.4	44.3	26.9	45.4	54.5	47.4
	5	15	13.04	33.6	115.0	57.8	22.7	51.3	50.3	44.2
	6	25	21.73	41.6	117.1	54.0	22.4	50.2	52.5	45.8
	7	5	4.34	32.8	97.4	46.0	23.6	45.0	51.4	50.0
V	1	31	23.84	37.9	115.0	51.1	20.2	50.2	50.3	43.4
	2	40	30.76	37.2	105.3	50.6	21.7	51.4	52.3	45.2
	5	10	7.69	35.4	116.9	54.1	21.7	50.4	51.2	41.0
	6	13	10.00	37.7	115.3	56.1	22.9	51.1	53.2	51.4
	7	23	17.69	38.0	118.0	55.3	22.6	51.1	52.1	45.1
	3, 4, 8	13	10.00	35.3	108.3	58.5	23.7	51.2	54.5	44.1
T	1	139	19.5	36.5	110.3	53.6	21.2	49.4	51.5	45.5
	0, 2	233	32.8	36.5	103.6	51.4	22.6	49.5	53.0	46.7
	3, 4, 8	73	10.3	35.2	95.8	51.7	24.2	46.3	55.4	49.8
	5	78	11.0	35.7	99.4	50.8	23.2	48.5	53.0	46.6
	6	96	13.5	39.8	113.9	54.9	22.2	50.8	52.9	46.8
	7	92	12.9	35.0	100.2	49.7	22.8	49.2	52.9	46.9

Table E-18. Length of teaching experience (item 54)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1	11	9.24	37.3	108.4	52.2	23.9	46.1	51.8	48.4
	2	22	18.48	33.7	101.1	49.4	21.3	50.3	52.8	48.6
	3	16	13.44	32.7	84.6	43.6	21.3	50.0	51.9	45.9
	4	31	26.05	35.2	97.2	49.2	21.6	47.6	51.5	45.8
	5	24	20.16	35.3	106.8	53.3	21.6	46.9	54.4	48.1
	6	15	12.60	36.0	110.7	53.6	24.4	43.6	51.2	45.3
II	1	13	6.84	37.3	98.2	50.8	21.8	43.8	56.4	48.3
	2	26	13.68	34.0	100.3	49.7	20.6	51.8	53.8	48.3
	3	25	13.15	36.0	94.1	50.4	22.6	50.4	51.3	47.8
	4	38	20.00	33.2	107.7	54.8	22.7	50.8	53.3	46.8
	5	64	33.68	35.2	94.3	49.8	24.0	46.8	53.6	48.4
	6	24	12.63	38.0	105.0	53.0	22.3	46.6	52.1	48.5
III	1	13	8.28	31.8	96.3	46.9	20.5	44.8	52.2	48.1
	2	15	9.55	38.6	115.5	55.7	22.1	52.0	52.7	47.1
	3	27	17.19	37.6	101.6	50.4	22.9	50.9	53.1	45.3
	4	36	22.92	37.5	105.9	53.1	22.9	47.9	56.5	46.9
	5	43	27.38	35.2	104.7	52.7	23.9	48.1	54.2	45.9
	6	23	14.64	38.9	110.3	57.2	23.7	47.4	52.0	48.7
IV	1	8	7.01	34.4	116.8	57.1	21.9	53.5	52.3	46.4
	2	11	9.64	38.8	87.6	48.5	25.1	52.1	55.0	49.9
	3	14	12.28	34.9	111.1	53.9	20.3	52.0	49.3	45.9
	4	23	20.17	37.7	120.2	57.3	22.7	50.2	52.7	46.2
	5	31	27.19	39.2	107.4	53.2	22.1	48.7	52.9	47.3
	6	27	23.68	38.3	111.3	54.2	23.2	49.8	50.7	44.6
V	1	5	3.87	34.4	115.0	55.2	19.8	51.8	54.4	48.8
	2	11	8.52	33.7	94.4	49.7	19.5	53.5	48.5	43.7
	3	12	9.30	38.1	96.3	48.5	22.9	54.2	55.6	45.3
	4	27	20.93	35.8	121.4	54.1	20.3	51.7	50.5	43.3
	5	41	31.78	38.0	111.2	53.1	22.6	51.5	53.1	45.4
	6	33	25.58	39.1	115.9	54.4	22.8	47.7	51.4	45.0

Table E-29. Graduate credits earned (item 33)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
	1	44	36.97	34.5	103.0	50.0	21.4	47.6	51.0	45.6
	2	47	39.49	35.4	94.4	48.3	23.2	47.0	52.2	48.0
I	3	8	6.72	36.5	106.1	52.3	20.5	47.4	52.4	42.4
	4	6	5.04	24.3	109.0	56.0	22.2	42.0	51.0	48.2
	5	14	11.76	35.6	109.1	56.2	21.9	50.1	53.4	47.1
	1	52	27.36	34.2	93.6	50.0	21.7	47.6	55.5	48.0
	0, 2	69	36.31	34.9	99.2	50.7	22.9	48.5	51.6	47.7
II	3	32	16.84	35.6	101.9	52.1	22.7	50.9	52.5	49.1
	4	19	10.00	36.3	105.1	53.6	23.2	51.3	54.6	45.1
	5	18	9.47	38.1	111.0	51.0	34.3	44.0	53.4	48.3
	1	38	24.20	37.1	106.4	52.4	22.1	48.9	53.7	48.6
	0, 2	68	43.31	36.2	101.3	51.1	23.3	47.9	54.2	46.4
III	3	20	12.73	35.9	105.2	55.1	23.3	45.9	54.0	46.0
	4	14	8.91	36.0	120.0	57.6	21.6	51.6	50.9	43.1
	5	17	10.82	39.8	109.6	54.2	24.7	50.9	54.4	47.0
	1	22	19.13	36.3	104.1	52.4	23.2	52.0	51.2	46.7
	0, 2	44	38.26	35.9	107.0	53.9	21.0	49.0	51.9	47.0
IV	3	13	11.30	40.9	107.4	51.0	21.7	49.3	54.0	45.3
	4	10	8.69	42.0	118.0	57.4	22.1	49.1	51.9	46.1
	5	26	22.60	38.4	116.7	55.0	23.3	50.9	52.5	45.7
	1	16	12.30	35.4	93.6	49.0	21.1	52.4	54.2	47.7
	0, 2	44	33.84	35.6	100.5	47.6	22.0	49.0	52.1	45.0
V	3	17	13.07	40.6	135.0	58.2	20.7	53.1	49.7	40.6
	4	17	13.07	38.0	129.1	61.5	21.3	51.0	50.1	41.9
	5	36	27.69	38.3	115.1	55.4	21.7	50.3	52.9	46.3

Table E-38. Time elapsed since last college credit was earned (Item 58)

SS	Item Resp	CC	%	Sm	MTAI	STAI	SCom	Fam	Prof	Com
	0, 1	58	48.73	35.6	100.0	49.8	22.2	47.1	53.4	48.5
	2	23	19.32	34.3	97.5	48.7	22.0	46.8	50.5	45.7
I	3	16	13.45	33.5	106.4	53.1	20.4	51.4	49.4	44.2
	4	11	9.24	31.5	90.8	46.6	21.3	42.9	54.2	44.7
	5	6	5.04	36.5	113.8	57.3	22.3	51.0	50.0	45.5
	6	5	4.20	32.4	116.2	53.8	28.4	52.6	52.8	50.4
	0, 1	80	42.10	35.2	103.5	51.8	22.4	50.7	52.5	47.9
	2	55	28.94	36.8	102.7	52.5	23.3	49.8	52.3	48.5
II	3	20	10.52	33.2	96.5	47.7	22.4	48.6	54.1	50.7
	4	17	8.94	33.6	93.4	50.5	22.6	44.4	50.8	45.9
	5	16	8.42	34.6	86.0	50.1	23.9	48.5	55.4	45.7
	6	2	1.05	39.0	78.5	53.5	26.5	45.0	59.0	47.0
	1	69	43.94	35.1	105.6	53.8	22.5	48.0	52.2	45.9
	2	38	24.20	37.6	112.0	52.8	21.9	52.9	52.8	44.8
III	3	22	14.01	39.5	103.8	50.3	24.6	47.7	53.3	46.7
	4	12	7.64	33.3	93.6	50.0	25.6	42.8	60.0	51.3
	5	13	8.28	40.8	100.8	53.6	24.0	44.2	57.0	48.9
	6	3	1.91	39.3	107.7	59.0	23.7	53.7	64.3	50.0
	1	53	46.08	37.9	115.6	56.5	22.4	50.4	51.1	45.5
	2	29	25.21	39.4	111.6	53.4	23.0	51.8	52.5	46.2
IV	3	22	19.13	35.5	102.4	51.3	22.0	47.0	52.5	47.6
	4	6	5.21	36.7	97.5	48.8	19.8	56.7	52.7	48.3
	5	1	.86	39.0	102.0	56.0	31.0	47.0	58.0	43.0
	6	4	3.47	33.8	87.0	49.5	23.3	49.5	60.0	50.0
	1	53	40.76	38.9	116.5	54.9	22.5	53.2	52.3	45.5
	2	45	34.61	36.5	111.0	51.8	20.8	49.5	50.6	43.3
V	3	20	15.38	33.6	103.3	51.2	21.7	49.7	54.1	45.0
	4	10	7.69	38.4	109.8	51.6	26.2	49.2	52.7	48.2
	5	1	.76	44.0	98.0	54.0	26.0	31.0	55.0	50.0
	6	1	.76	41.0	139.0	75.0	25.0	61.0	53.0	54.0

Table E-31. Honors earned by teachers (Item 38)

SS	Item Resp	CC	%	Sm	MTAI	HTAI	SCom	Fam	Prof	Com
I	1	101	84.87	33.0	95.0	50.1	22.0	47.1	52.3	47.0
	2, 4	13	10.92	39.6	110.3	51.5	22.6	49.3	51.5	46.0
	3, 5	5	4.20	37.0	116.4	57.0	22.8	54.0	51.0	47.6
II	0, x, 1, y	151	79.47	35.1	95.0	51.3	22.9	48.5	53.1	48.0
	2, 4	32	16.84	33.0	94.9	49.3	21.7	48.4	52.9	47.1
	3, 5	7	3.68	35.6	123.9	61.4	24.4	49.3	58.1	52.1
III	1	102	64.96	36.0	105.0	52.6	22.2	47.0	53.4	47.3
	2, 4	46	29.29	37.5	109.0	54.2	24.0	50.3	54.5	45.1
	3, 5	9	5.73	42.1	86.1	48.7	27.6	47.6	56.3	48.7
IV	0, 1	81	70.43	27.3	106.5	53.4	22.9	49.3	52.6	47.0
	2, 4	29	25.21	37.2	121.2	56.5	21.1	53.1	51.2	45.0
	3, 5	5	4.34	44.0	101.6	51.4	22.6	51.4	49.6	44.2
V	0, 1	93	71.53	36.6	112.3	51.0	21.5	50.4	51.0	44.9
	2, 4	30	23.07	39.2	107.0	55.0	22.6	51.3	52.3	45.5
	3, 5, 6	7	5.38	38.6	127.6	63.3	22.9	55.9	53.3	43.7

PRECEDING PAGE BLANK-NOT FILMED

BIBLIOGRAPHY

Anderson, H. H. "The Study of Certain Criteria of Teacher Effectiveness," *Journal of Experimental Education*, 23 (September, 1954), 47-71.

Beecher, Dwight E. *The Teaching Evaluation Record.* Syracuse: Syracuse University Press, 1953.

Cattell, Raymond B. "The Description of Personality: III. Principles and Findings in a Factor Analysis," *American Journal of Psychology*, 58 (January, 1945), 289-318.

Cook, Walter W., *et al. Minnesota Teacher Attitude Inventory.* Form A. New York: Psychological Corporation, 1951.

Cook, W. W., and Hoyt, C. J. "The Stability of MTAI Scores During Two to Seven Years of Teaching," *Journal of Teacher Education,* (September, 1960).

Hatcher, Hazel, *Characteristic Differences Among Homemaking Teachers of Varying Proficiencies.* Department of Education, Michigan State College and Board of Control, State Department of Education, Michigan, 1944.

Home Economics Research Committee. *Factors Affecting the Satisfaction of Home Economics Teachers.* American Vocational Association, 1948.

Hoyt, Cyril J., and Cook, W. W. "Predictive Validity of Minnesota Teacher Attitude Inventory," *Journal of Teacher Education,* (March, 1957).

Hoyt, Cyril J., and Stunkard, Clayton L. "Estimation of Test Reliability for Unrestricted Item Scoring Methods," *Educational and Psychological Measurement,* 12(1952), 756-758.

Lindquist, E. F. *Design and Analysis of Experiments in Psychology and Education.* Boston: Houghton Mifflin Co., 1957.

Medley, D. M., and Mitzell, H. E. "A Technique for Measuring Classroom Behavior," *Journal of Educational Psychology*, 49 (April, 1958), 86-92.

Ryans, David G. "The Investigation of Teacher Characteristics," *The Educational Record,* 34 (October, 1953), 374.

Ryans, David G., and Wandt, Edwin. "A Factor Analysis of Observed Teacher Behavior in the Secondary School: A Study of Criterion Data," _Educational and Psychological Measurement_, 12 (Winter, 1952), 574-586.

Symonds, Percival M. "Characteristics of the Effective Teacher Based on Pupil Evaluations," _Journal of Experimental Education_, 23 (June, 1955), 289-310.

United States Department of Health, Education and Welfare: Office of Education. _Digest of Annual Reports of State Boards for Vocational Education_, 1958.